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ORANGES AND ORANGE PRODUCTS

CHANGING ECONOMIC RELATIONSHIPS

by

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by

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TABLE 1

World Production of Oranges, Tangerines and Mandarins, by Countries, from 1920-21

Country	Average 1920-21 to 1924-25	1925-26 to 1929-30	1930-31 to 1934-35	1935-36 to 1939-40	1940-41 to 1944-45	1945-46 to 1949-50	1948-49	1949-50	1950-51 a/
	1,000 boxes b/								
United States	31,376	39,035	53,548	67,034	95,977	110,011	104,120	108,465	121,710
Per cent United States was of world	30.9	29.5	30.4	31.4	37.2	41.7	37.7	40.0	40.7
Brazil	3,052	8,224	28,484	34,466	32,606	33,155	35,138	35,674	28,500
Spain	26,895	37,202	34,697	24,167	27,263	22,873	26,266	21,593	29,610
Japan	7,548	10,906	12,926	15,895	17,893	8,473	9,126	9,415	13,506
Italy	10,776	11,898	14,304	11,701	11,186	11,243	14,686	12,120	19,299
Palestine	1,433	2,152	4,405	8,652	7,494	8,450	6,300 c/	5,020 c/	6,699
South Africa	518	1,180	2,280	4,000	5,918	5,418	5,863	6,380	6,023
Mexico	2,820	3,113	3,486	4,761	7,719	11,296	12,605	12,950	11,000
Algeria	2,388	1,994	2,063	3,168	3,576	4,791	6,829	6,726	8,133
Australia	1,708	2,078	2,593	2,683	2,646	3,120	3,251	3,940	2,880
Egypt	1,216	1,859	3,771	6,375	7,135	6,631	6,494	6,251	8,923
Greece	d/	d/	d/	1,470	1,500	1,870	2,223	2,717	2,816
Argentina	3,980	4,220	4,705	9,212	13,818	9,800	12,400	10,600	11,500
Others	7,942	8,626	9,064	19,746	23,210	26,854	30,831	29,244	28,871
World total	101,652	132,487	176,326	213,330	257,941	263,985	276,132	271,095	299,400

a/ Preliminary.
b/ Production in foreign countries converted to boxes of weight, 70 pounds.
c/ Israel only.
d/ Included in others.

Sources: U. S. Dept. of Agriculture. Office of Foreign Agricultural Relations. World Citrus Production and Trade, Washington D.C., September 1945 and Foreign Agriculture Circular, Washington, D.C., June 1949, June 1950, and January 1951, and Foreign Agricultural Circular FCF 3-52, Washington, D.C., July 28, 1951.

TABLE 2

Production of Oranges, United States and California and Per Cent California Production Was of United States Production, from 1919-20

Season	United States production	California[a] production	Per cent California[b] was of United States
	1,000 boxes		per cent
1919-20	24,359	16,632	68.3
1920-21	32,685	23,771	72.7
1921-22	22,118	14,021	63.4
1922-23	31,819	21,283	68.6
1923-24	37,750	24,153	64.0
1924-25	29,060	18,506	63.7
1925-26	34,055	24,200	71.1
1926-27	38,735	28,252	72.9
1927-28	31,886	22,737	71.3
1928-29	54,718	39,159	71.6
1929-30	30,979	21,195	68.4
1930-31	52,660	35,179	66.8
1931-32	47,902	34,658	72.4
1932-33	49,715	34,265	68.9
1933-34	45,174	28,439	63.0
1934-35	61,988	45,047	72.7
1935-36	49,973	32,809	65.7
1936-37	51,538	29,827	57.9
1937-38	71,985	45,914	63.8
1938-39	75,131	41,420	55.1
1939-40	73,342	44,425	60.6
1940-41	82,810	50,778	61.3
1941-42	83,063	52,155	62.8
1942-43	85,149	44,329	52.1
1943-44	103,051	51,961	50.4
1944-45	109,210	60,500	55.4
1945-46	100,150	44,010	43.9
1946-47	113,840	53,530	47.0
1947-48	110,510	45,830	41.5
1948-49	99,720	37,010	37.1
1949-50	103,465	41,860	40.5
1950-51	116,910	45,210	38.7

a/ Includes small quantities of tangerines.
b/ Percentages calculated.

Sources: U. S. Bureau of Agricultural Economics. Citrus Fruits, Production, Farm Disposition, Value and Utilization of Sales. Washington, D.C., October 1945, 1947, 1948, 1949, 1950, and 1951.

TABLE 3

Total Production of Oranges in California, Florida, Arizona, and Texas, from 1919-20 - 51

Season	California[a]	Florida	Arizona[a]	Texas[a]
	1,000 boxes			
1919-20	16,632	7,550	80	9
1920-21	23,771	8,700	60	5
1921-22	14,021	7,850	80	5
1922-23	21,283	10,150	81	10
1923-24	24,153	13,150	86	6
1924-25	18,506	10,400	60	17
1925-26	24,200	9,500	86	12
1926-27	28,252	10,100	75	41
1927-28	22,737	8,650	54	85
1928-29	39,159	15,000	99	125
1929-30	21,195	8,950	137	261
1930-31	35,179	16,800	139	250
1931-32	34,658	12,200	145	520
1932-33	34,265	14,500	147	325
1933-34	28,439	15,900	155	430
1934-35	45,047	15,600	170	650
1935-36	32,809	15,900	240	777
1936-37	29,827	19,100	220	2,000
1937-38	45,914	23,900	350	1,440
1938-39	41,420	29,900	430	2,815
1939-40	44,425	25,600	595	2,360
1940-41	50,778	28,600	528	2,650
1941-42	52,155	27,200	660	2,850
1942-43	44,329	37,200	730	2,550
1943-44	51,961	46,200	1,100	3,550
1944-45	60,500	42,800	1,150	4,400
1945-46	44,010	49,800	1,210	4,800
1946-47	53,530	53,700	1,200	5,000
1947-48	45,830	58,400	780	5,200
1948-49	37,010	58,300	710	3,400
1949-50	41,860	58,500	985	1,760
1950-51	45,210	67,300	1,400	2,700

a/ Includes small quantities of tangerines.

Sources: U. S. Bureau of Agricultural Economics. Citrus Fruits, Production, Farm Disposition, Value and Utilization of Sales. Washington, D. C., October 1945, 1947, 1948, 1949, 1950, and 1951.

TABLE 4

California-Arizona Orange Production by Districts,, from 1943-44

Season	California-Arizona	Central-Northern California	Southern California	Arizona-Desert Valley
	cars			
1943-44	111,928	23,252	86,693	1,983
1944-45	132,455	21,357	108,606	2,492
1945-46	96,778	15,423	78,646	2,709
1946-47	116,943	23,686	90,628	2,629
1947-48	99,805	19,751	78,270	1,784
1948-49	80,181	10,279	68,323	1,579
1949-50	91,243	12,966	76,114	2,163
1950-51	99,564	13,888	82,474	3,202

Sources: Orange Administrative Committee. Annual summaries and Weekly Market News Bulletin. Annual summaries are by district and variety.

TABLE 5

California-Arizona Orange Production by Districts as Per Cent of Total California-Arizona Production, from 1943-44

Season	Central-Northern California	Southern California	Arizona-Desert Valley
	per cent		
1943-44	20.8	77.4	1.8
1944-45	16.1	82.0	1.9
1945-46	15.9	81.3	2.8
1946-47	20.3	77.5	2.2
1947-48	19.8	78.4	1.8
1948-49	12.8	85.2	2.0
1949-50	14.2	83.4	2.4
1950-51	14.0	82.8	3.2

Source: Percentages calculated from data in Table 4.

TABLE 6

Production of Oranges by Varieties, California and Florida, from 1934-35

Season	California				Florida			
	Valencias		Navels and miscellaneous		Valencias		Early and midseason	
	000 packed boxes	per cent of total[a]	000 packed boxes	per cent of total[a]	000 packed boxes	per cent of total[a]	000 packed boxes	per cent of total[a]
1934-35	26,057	57.8	18,990	42.2	4,900	31.4	10,700	68.6
1935-36	18,340	55.9	14,469	44.1	6,300	39.6	9,600	60.4
1936-37	16,593	55.6	13,234	44.4	7,400	38.7	11,700	61.3
1937-38	29,234	63.7	16,680	36.3	10,500	43.9	13,400	56.1
1938-39	23,450	56.6	17,970	43.4	12,750	42.6	17,150	57.4
1939-40	26,904	60.6	17,521	39.4	10,000	39.1	15,600	60.9
1940-41	31,223	61.5	19,555	38.5	12,400	43.4	16,200	56.6
1941-42	30,181	57.9	21,974	42.1	12,000	44.1	15,200	55.9
1942-43	30,088	67.9	14,241	32.1	18,100	48.7	19,100	51.3
1943-44	30,890	59.4	21,071	40.6	20,400	44.2	25,800	55.8
1944-45	38,400	63.5	22,100	36.5	21,100	49.3	21,700	50.7
1945-46	26,330	59.8	17,680	40.2	24,400	49.0	25,400	51.0
1946-47	33,860	63.3	19,670	36.7	23,200	43.2	30,500	56.8
1947-48	26,930	58.8	18,900	41.2	27,400	46.9	31,000	53.1
1948-49	25,100	67.8	11,910	32.2	26,300	45.1	32,000	54.9
1949-50	26,230	63.1	15,630	36.9	24,900	42.6	33,600	57.4
1950-51	30,600	67.7	14,610	32.3	30,500	45.3	36,800	54.7

a/ Percentages calculated.

Sources: U. S. Bureau of Agricultural Economics. Citrus Fruits, Production, Farm Disposition, Value and Utilization of Sales. Washington, D. C., October 1945, 1947, 1948, 1949, 1950, and 1951.

TABLE 7

Central-Northern California Annual Orange Production by Varieties, from 1943-44

Season	Valencia		Navel and miscellaneous	
	Production	Per cent of total[a]	Production	Per cent of total[a]
	cars	per cent	cars	per cent
1943-44	8,297	35.7	14,955	64.3
1944-45	6,253	29.3	15,104	70.7
1945-46	5,339	34.6	10,084	65.4
1946-47	7,043	29.7	16,643	70.3
1947-48	5,170	26.2	14,581	73.8
1948-49	1,803	17.5	8,476	82.5
1949-50	3,113	24.0	9,853	76.0
1950-51	4,638	33.4	9,250	66.6

a/ Percentages calculated.

Sources: Orange Administrative Committee. Annual summaries and Weekly Market News Bulletins.

TABLE 8

Southern California Annual Orange Production by Varieties, from 1943-44

Season	Valencia		Navel and miscellaneous	
	Production	Per cent of total a/	Production	Per cent of total a/
	cars	per cent	cars	per cent
1943-44	57,823	66.7	28,870	33.3
1944-45	76,228	70.2	32,378	29.8
1945-46	51,049	64.9	27,597	35.1
1946-47	65,562	72.3	25,066	27.7
1947-48	52,401	66.9	25,869	33.1
1948-49	51,411	75.2	16,912	24.8
1949-50	52,844	69.4	23,270	30.6
1950-51	60,944	73.9	21,539	26.1

a/ Percentages calculated.

Sources: Orange Administrative Committee. Annual summaries and Weekly Market News Bulletins.

TABLE 9

Arizona-Desert Valley Annual Orange Production by Varieties, from 1943-44

Season	Valencia		Navel and miscellaneous	
	Production	Per cent of total a/	Production	Per cent of total a/
	cars	per cent	cars	per cent
1943-44	1,000	50.4	983	49.6
1944-45	1,416	56.8	1,076	43.2
1945-46	1,491	55.0	1,218	45.0
1946-47	1,367	52.0	1,262	48.0
1947-48	829	46.5	955	53.5
1948-49	616	39.0	963	61.0
1949-50	918	42.4	1,245	57.6
1950-51	1,851	57.8	1,351	42.2

a/ Percentages calculated.

Sources: Orange Administrative Committee. Annual summaries and Weekly Market News Bulletins.

TABLE 10

United States Orange Bearing Acreage by States, from 1919-20

Season	California	Arizona	Texas	Florida	Others	Total United States
	thousands					
1919-20	155.8	0.5	0.2	52.8	3.0	212.3
1920-21	157.8	0.6	0.3	57.7	5.8	222.2
1921-22	163.2	0.6	0.5	65.1	6.3	235.7
1922-23	166.5	0.7	0.6	74.0	12.9	254.7
1923-24	169.7	0.8	0.8	87.7	14.6	273.6
1924-25	173.0	0.9	1.0	106.2	3.5	284.6
1925-26	174.8	0.9	1.2	109.2	3.8	289.9
1926-27	180.8	1.0	1.4	123.5	4.3	311.0
1927-28	182.9	1.0	1.8	126.2	5.0	316.9
1928-29	185.9	1.1	3.0	129.3	5.2	324.5
1929-30	190.1	1.1	5.1	133.0	5.1	334.4
1930-31	192.5	1.3	7.4	140.0	4.9	346.1
1931-32	197.3	1.6	9.9	155.0	5.2	369.0
1932-33	200.4	2.0	13.7	169.0	5.5	390.6
1933-34	197.9	2.7	18.4	178.6	6.1	403.7
1934-35	206.7	4.1	20.9	187.3	6.6	425.6
1935-36	211.1	5.5	21.4	195.7	7.1	440.8
1936-37	215.7	6.3	22.0	202.4	7.3	453.7
1937-38	221.6	6.8	23.1	208.5	7.5	467.5
1938-39	226.3	7.0	24.0	213.5	7.9	478.7
1939-40	229.2	7.3	24.2	216.2	8.3	485.2
1940-41	231.1	7.3	24.7	226.0	8.0	497.1
1941-42	232.1	7.3	25.4	236.0	4.8	505.6
1942-43	233.7	7.3	26.3	246.3	4.6	518.2
1943-44	236.0	7.2	27.2	251.3	4.5	526.2
1944-45	237.8	7.1	28.4	256.3	4.5	534.1
1945-46	239.5	7.1	30.3	264.9	4.5	546.3
1946-47	240.2	7.1	32.9	270.0	4.5	554.7
1947-48	239.4	7.8	35.5	280.5	4.5	567.7
1948-49	239.2	8.3	40.5	289.9	4.5	582.4
1949-50	215.6	8.3	28.0 a/	300.9	4.5	557.3
1950-51	211.9	8.3	28.0 a/	309.5	4.5	562.2

a/ Approximate--due to bad freeze in January, 1949.

Source: U. S. Bureau of Agricultural Economics. Citrus Fruits, Production, Farm Disposition, Value and Utilization of Sales, October, 1945, October, 1947, and subsequent annual issues.

TABLE 11

Orange Bearing Acreage, California and Florida as Per Cent of United States Bearing Acreage, from 1919-20

Season	California	Florida
	per cent[a]	
1919-20	73.4	24.9
1920-21	71.0	26.0
1921-22	69.2	27.6
1922-23	65.4	29.1
1923-24	62.0	32.1
1924-25	60.8	37.3
1925-26	60.3	37.7
1926-27	58.1	39.7
1927-28	57.7	39.8
1928-29	57.3	39.8
1929-30	56.8	39.8
1930-31	55.6	40.5
1931-32	53.5	42.0
1932-33	51.3	43.3
1933-34	49.0	44.2
1934-35	48.6	44.0
1935-36	47.9	44.4
1936-37	47.5	44.6
1937-38	47.4	44.6
1938-39	47.3	44.6
1939-40	47.2	44.6
1940-41	46.5	45.5
1941-42	45.9	46.7
1942-43	45.1	47.5
1943-44	44.8	47.8
1944-45	44.5	48.0
1945-46	43.8	48.5
1946-47	43.3	48.7
1947-48	42.2	49.4
1948-49	41.1	49.8
1949-50	38.1	54.7
1950-51	37.7	55.1

a/ Percentages calculated.

Source: U. S. Bureau of Agricultural Economics. Citrus Fruits, Production, Farm Disposition, Value and Utilization of Sales, October, 1945, October, 1947, and subsequent annual issues.

TABLE 12

Estimates of Florida Nonbearing Orange Acreage, from 1931-32

Season	Trees planted[a]	4-year total[b]	Nonbearing acreage[c]	Nonbearing acreage[d]
1928-29	699,343			
1929-30	295,031			
1930-31	401,023			
1931-32	430,379	1,825,776	28,100	
1932-33	499,679	1,626,112	25,000	
1933-34	440,429	1,771,510	27,300	
1934-35	351,289	1,721,776	26,500	
1935-36	530,564	1,821,961	28,000	
1936-37	746,849	2,069,131	31,800	
1937-38	799,439	2,428,141	37,400	
1938-39	512,526	2,589,378	39,800	
1939-40	403,775	2,462,589	37,900	
1940-41	592,208	2,307,948	35,500	
1941-42	579,808	2,088,317	32,100	
1942-43	533,802	2,109,593	32,500	
1943-44	701,977	2,407,795	37,000	
1944-45	611,254	2,426,841	37,300	
1945-46	722,550	2,569,583	39,500	
1946-47	728,882	2,764,663	42,500	
1947-48	518,383	2,581,069	39,700	38,100
1948-49	399,444	2,369,259	36,500	38,100
1949-50				44,700
1950-51				42,000[e]

a/ From Florida Citrus Mutual, Annual Statistical Report.

b/ Calculated from column 1.

c/ Column 2 divided by 65 trees per acre.

d/ From Florida Crop and Livestock Reporting Service, Florida Citrus Fruit, annual issues.

e/ Estimated as approximately two-thirds of the 62,000 acres of nonbearing citrus trees planted in Florida as of June 30, 1951.

TABLE 13

Orange Bearing Acreage by Variety and State, California and Florida from 1919-20

Season	Variety and state			
	Valencias		Early and midseason varieties	
	California	Florida	California	Florida
	thousands			
1919-20	63.8	--	92.0	--
1920-21	66.4	--	91.4	--
1921-22	68.9	--	94.3	--
1922-23	71.7	--	94.8	--
1923-24	74.4	--	95.3	--
1924-25	77.4	--	95.6	--
1925-26	80.4	--	94.4	--
1926-27	85.5	--	95.3	--
1927-28	88.0	--	94.9	--
1928-29	91.4	--	94.5	--
1929-30	95.9	--	94.2	--
1930-31	98.8	--	93.7	--
1931-32	103.9	--	93.4	--
1932-33	107.9	--	92.5	--
1933-34	108.7	79.5	89.2	99.1
1934-35	117.9	84.3	88.8	103.0
1935-36	122.3	88.8	88.8	106.9
1936-37	127.3	91.5	88.4	110.9
1937-38	132.8	94.0	88.8	114.5
1938-39	136.5	95.9	89.8	117.6
1939-40	138.7	96.2	90.5	120.0
1940-41	140.6	98.3	90.5	127.7
1941-42	141.8	102.4	90.3	133.6
1942-43	143.4	105.7	90.3	140.6
1943-44	145.5	106.6	90.5	144.7
1944-45	146.9	108.4	90.9	147.9
1945-46	148.5	111.3	91.0	153.6
1946-47	149.2	113.9	91.0	156.1
1947-48	148.9	118.4	90.5	162.1
1948-49	149.2	122.4	90.0	167.5
1949-50	134.9	126.6	80.7	174.3
1950-51	132.4	130.5	79.5	179.0

Source: U. S. Bureau of Agricultural Economics. Citrus Fruits, Production, Farm Disposition, Value and Utilization of Sales. October, 1947 and subsequent annual issues.

TABLE 14

Orange Bearing Acreage by Variety, California and Florida, as Per Cent of State Orange Bearing Acreage, from 1919-20

Season	California		Florida	
	Valencia	Navel and miscel-laneous	Valencia	Early and midseason
	per cent			
1919-20	40.9	59.1		
1920-21	42.1	57.9		
1921-22	42.2	57.8		
1922-23	43.1	56.9		
1923-24	43.8	56.2		
1924-25	44.7	55.3		
1925-26	46.0	54.0		
1926-27	47.3	52.7		
1927-28	48.1	51.9		
1928-29	49.2	50.8		
1929-30	50.4	49.6		
1930-31	51.3	49.7		
1931-32	52.7	47.3		
1932-33	53.8	46.2		
1933-34	54.9	45.1	44.5	55.5
1934-35	57.0	43.0	45.0	55.0
1935-36	57.9	42.1	45.4	54.6
1936-37	59.0	41.0	45.2	54.8
1937-38	59.9	40.1	45.1	54.9
1938-39	60.3	39.7	44.9	55.1
1939-40	60.5	39.5	44.5	55.5
1940-41	60.8	39.2	43.5	56.5
1941-42	61.1	38.9	43.4	56.6
1942-43	61.4	38.6	42.9	57.1
1943-44	61.7	38.3	42.4	57.6
1944-45	61.8	38.2	42.3	57.7
1945-46	62.0	38.0	42.0	58.0
1946-47	62.1	37.9	42.2	57.8
1947-48	62.2	37.8	42.2	57.8
1948-49	62.4	37.6	42.2	57.8
1949-50	62.6	37.4	42.2	57.8
1950-51	62.5	37.5	42.2	57.8

Source: Calculated from data in Table 13.

TABLE 15

Total California Orange Acreage by Counties, 1939 to 1950

County	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Butte	1,820	1,582	1,582	1,265	1,275	1,287	1,287	1,293	1,293	1,293	1,293	856
Glenn	780	783	787	787	791	791	791	791	721	721	721	731
Sacramento	690	579	555	555	555	555	555	555	555	480	445	445
Fresno	3,340	3,326	3,322	3,352	3,349	3,415	3,497	3,490	3,628	3,795	3,723	3,767
Kern	1,452	1,533	1,533	1,533	1,533	1,533	1,531	1,533	1,533	1,518	1,398	1,424
Tulare	36,771	36,792	36,822	36,827	36,979	36,996	37,152	37,319	37,517	37,544	37,079	37,265
Placer	83	111	111	107	107	107	107	107	107	107	107	12
Imperial	1,429	1,428	1,159	997	896	910	910	910	910	910	812	756
Los Angeles	45,142	45,225	45,125	45,355	45,242	45,298	45,307	45,425	45,213	44,511	39,057	36,988
Orange	67,264	66,837	66,828	66,868	67,138	67,530	67,749	67,752	68,009	68,400	61,557	60,109
Riverside	19,121	19,136	19,175	18,772	18,809	19,141	19,162	19,357	19,579	19,604	17,730	17,699
San Bernardino	44,495	40,986	40,850	40,968	41,101	40,053	39,922	39,636	39,695	39,289	35,313	33,980
San Diego	8,276	8,128	8,155	8,172	8,129	8,092	8,117	8,141	8,124	8,074	7,910	7,884
Santa Barbara	287	280	271	270	270	270	270	271	219	142	142	120
Ventura	18,402	17,437	18,089	18,278	18,469	18,559	18,810	18,851	18,867	20,087	20,298	20,498
Others	321	228	220	218	218	218	216	215	198	174	134	124
State	249,673	244,391	244,584	244,324	244,861	244,755	245,383	245,646	246,168	246,649	227,719	222,658

Source: California Crop and Livestock Reporting Service. "Acreage Estimates, California Fruit and Nut Crops," annual reports.

TABLE 16

Total California Valencia Orange Acreage by Counties, 1939 to 1950

County	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Butte	1	1	1	1	1	1	1	1	1	1	1	7
Glenn	32	40	40	40	40	40	40	40	21	21	21	20
Sacramento	9	10	10	10	10	10	10	10	10	10	10	10
Fresno	636	631	631	631	631	631	635	635	635	816	816	812
Kern	108	84	84	84	84	84	84	84	84	75	58	58
Tulare	11,149	11,149	11,152	11,152	11,168	11,163	11,163	11,176	11,209	11,224	11,146	11,161
Placer	0	4	4	4	4	4	4	4	4	4	4	0
Imperial	866	866	722	667	567	587	587	587	587	587	517	461
Los Angeles	30,253	30,409	30,398	30,686	31,600	31,688	31,791	31,995	31,978	31,424	28,422	26,459
Orange	65,788	65,506	65,503	65,652	65,936	66,364	66,585	66,608	66,870	67,263	60,833	59,393
Riverside	4,736	4,772	4,873	4,902	4,941	5,051	5,081	5,255	5,344	5,393	5,324	5,293
San Bernardino	11,891	11,971	13,014	13,007	13,183	13,052	13,053	12,801	12,882	12,807	11,887	11,437
San Diego	6,643	7,060	7,101	7,120	7,092	7,076	7,101	7,128	7,110	7,066	7,158	7,125
Santa Barbara	173	169	169	169	169	169	169	169	168	117	117	92
Ventura	16,218	15,705	16,332	16,521	16,725	16,815	17,066	17,106	17,240	18,448	18,652	18,915
Others	41	18	9	8	8	8	8	9	11	11	15	11
State	148,544	148,395	150,043	150,654	152,159	152,743	153,378	153,608	154,154	155,267	144,981	141,254

Source: California Crop and Livestock Reporting Service. "Acreage Estimates, California Fruit and Nut Crops."

TABLE 17

Total California Navel and Miscellaneous Orange Acreage by Counties, 1939 to 1950

County	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Butte	1,819	1,581	1,581	1,264	1,274	1,286	1,286	1,292	1,292	1,292	1,292	849
Glenn	748	743	747	747	751	751	751	751	700	700	700	711
Sacramento	681	569	545	545	545	545	545	545	545	470	435	435
Fresno	2,704	2,695	2,691	2,721	2,718	2,784	2,862	2,855	2,993	2,979	2,907	2,955
Kern	1,344	1,449	1,449	1,449	1,449	1,449	1,447	1,449	1,449	1,443	1,340	1,366
Tulare	25,622	25,643	25,670	25,675	25,811	25,833	25,989	26,143	26,308	26,320	25,933	26,104
Placer	83	107	107	103	103	103	103	103	103	103	103	12
Imperial	563	562	437	330	329	323	323	323	323	323	295	295
Los Angeles	14,889	14,816	14,727	14,669	13,642	13,610	13,516	13,430	13,235	13,087	10,635	10,529
Orange	1,476	1,331	1,325	1,216	1,202	1,166	1,164	1,144	1,139	1,137	724	716
Riverside	14,385	14,364	14,302	13,870	13,868	14,090	14,081	14,102	14,235	14,211	12,406	12,406
San Bernardino	32,604	29,015	27,836	27,961	27,918	27,001	26,869	26,835	26,813	26,482	23,426	22,543
San Diego	1,633	1,068	1,054	1,052	1,037	1,016	1,016	1,013	1,014	1,008	752	759
Santa Barbara	114	111	102	101	101	101	101	102	51	25	25	28
Ventura	2,184	1,732	1,757	1,757	1,744	1,744	1,744	1,745	1,627	1,639	1,646	1,583
Others	280	210	211	210	210	210	208	206	187	163	119	113
State	101,129	95,996	94,541	93,670	92,702	92,012	92,005	92,038	92,014	91,382	82,738	81,404

Source: California Crop and Livestock Reporting Service. "Acreage Estimates, California Fruit and Nut Crops."

TABLE 18

Total California Orange Acreage by Counties as Per Cent of State Total Orange Acreage, All Oranges and by Varieties, 1940 and 1950

County	Total acreage		Valencia acreage		Navel and miscellaneous acreage	
	1940	1950	1940	1950	1940	1950
Butte	0.65	0.38	0.00	0.00	1.65	1.04
Glenn	0.32	0.33	0.03	0.00	0.77	0.87
Sacramento	0.24	0.20	0.00	0.00	0.59	0.53
Fresno	1.36	1.69	0.43	0.57	2.81	3.63
Kern	0.63	0.64	0.06	0.04	1.51	1.68
Tulare	15.05	16.74	7.51	7.90	26.71	32.07
Placer	0.05	0.01	0.00	0.00	0.11	0.01
Imperial	0.58	0.34	0.58	0.33	0.59	0.36
Los Angeles	18.51	16.61	20.49	18.73	15.43	12.93
Orange	27.35	27.00	44.14	42.05	1.39	0.88
Riverside	7.83	7.95	3.19	3.75	14.96	15.24
San Bernardino	16.77	15.26	8.07	8.10	30.23	27.69
San Diego	3.33	3.54	4.76	5.04	1.11	0.93
Santa Barbara	0.11	0.05	0.11	0.07	0.12	0.03
Ventura	7.13	9.21	10.58	13.39	1.80	1.94
Others	0.09	0.06	0.00	0.00	0.22	0.14

Source: Calculated from data in Tables 15, 16, and 17.

TABLE 19

California Bearing and Nonbearing Orange Acreage and Per Cent Each Was of County Total Orange Acreage, 1950

County	Bearing acreage		Nonbearing acreage	
	acres	per cent of county total[a]	acres	per cent of county total[a]
Butte	841	98.2	15	1.8
Glenn	724	99.0	7	1.0
Sacramento	445	100.0	0	0.0
Fresno	3,507	93.1	260	6.9
Kern	1,391	97.7	33	2.3
Tulare	36,304	97.4	961	2.6
Placer	12	100.0	0	0.0
Imperial	679	89.8	77	10.2
Los Angeles	35,442	95.8	1,546	4.2
Orange	56,773	94.5	3,336	5.5
Riverside	16,827	95.1	872	4.9
San Bernardino	33,728	99.3	252	0.7
San Diego	6,937	88.0	947	12.0
Santa Barbara	109	90.8	11	9.2
Ventura	18,081	88.2	2,417	11.8
Others	123	99.2	1	0.8
State	211,923	95.2	10,735	4.8

a/ Percentages calculated.

Source: California Crop and Livestock and Reporting Service. "Acreage Estimates, California Fruit and Nut Crops."

TABLE 20

California Orange Acreage by Variety and Age Group, 1939 and 1949

Age of trees	Variety and year											
	Valencia		Navel		Seedlings		Other varieties		Total navel and miscellaneous		All oranges	
	1939	1949	1939	1949	1939	1949	1939	1949	1939	1949	1939	1949
1st year	1,792	521	188	104	73	--	--	--	261	104	2,053	625
2nd year	1,938	2,526	475	345	--	--	8	29	483	373	2,421	2,900
3rd year	1,869	2,622	762	446	--	7	1	45	763	498	2,632	3,120
4th year	1,432	2,409	550	232	3	--	17	9	570	241	2,002	2,650
5th year	2,700	1,941	889	179	40	--	38	5	967	184	3,667	2,125
6th year	2,646	1,475	1,044	435	10	--	77	1	1,131	436	3,777	1,911
7th year	4,369	1,212	1,773	222	6	--	115	2	1,894	224	6,263	1,436
8th year	6,159	1,339	1,637	220	26	--	31	7	1,694	227	7,853	1,566
9th year	7,975	1,365	1,414	260	14	--	23	6	1,451	266	9,426	1,631
10th year	7,215	2,529	1,391	417	8	--	45	12	1,444	429	8,659	2,958
11-15 years	25,966	10,386	13,127	2,692	39	12	710	69	13,876	2,773	39,842	13,159
16-20 years	18,273	21,298	6,887	4,474	72	1	238	136	7,197	4,611	25,470	25,909
21-25 years	24,384	18,562	12,799	3,038	182	--	422	22	13,403	3,060	37,787	21,622
26 years and older	41,826	76,796	52,130	66,531	957	307	1,364	1,604	54,451	68,442	96,277	145,238
Bearing	138,691	134,862	91,567	77,945	1,308	320	3,010	1,859	95,885	80,124	234,576	214,986
Nonbearing	9,853	10,119	3,499	1,650	122	7	79	88	3,700	1,745	13,553	11,864
Total	148,544	144,981	95,066	79,595	1,430	327	3,089	1,947	99,585	81,869	248,129	226,850
Per cent nonbearing	6.6	7.0	3.7	2.1	8.5	2.1	2.6	4.5	3.7	2.1	5.5	5.2

Source: California Crop and Livestock Reporting Service. "Acreage Estimates, California Fruit and Nut Crops," annual reports, 1939 and 1949.

TABLE 21

Yield of Oranges Per Bearing Acre by States, from 1919-20

Season	California	Florida	Arizona	Texas
	boxes per bearing acre			
1919-20	106.8	143.0	160.0	45.0
1920-21	150.6	150.8	100.0	16.7
1921-22	85.9	120.6	133.3	10.0
1922-23	127.8	137.2	115.7	16.7
1923-24	142.3	149.9	107.5	7.5
1924-25	107.0	97.9	66.7	17.0
1925-26	138.4	87.0	95.6	10.0
1926-27	156.3	81.8	75.0	29.3
1927-28	124.3	68.5	54.0	47.2
1928-29	210.6	116.0	90.0	41.7
1929-30	111.5	67.3	124.5	51.2
1930-31	182.7	120.0	106.9	33.8
1931-32	175.7	78.7	90.6	52.5
1932-33	171.0	85.8	73.5	23.7
1933-34	143.7	89.0	57.4	23.4
1934-35	217.9	83.3	41.5	31.1
1935-36	155.4	81.2	43.6	36.3
1936-37	138.3	94.4	34.9	90.9
1937-38	207.2	114.6	51.5	62.3
1938-39	183.0	140.0	61.4	117.3
1939-40	193.8	118.4	81.5	97.5
1940-41	219.7	126.5	72.3	107.3
1941-42	224.7	115.3	90.4	112.2
1942-43	189.7	151.0	100.0	97.0
1943-44	220.2	183.8	152.7	130.5
1944-45	254.4	167.0	162.0	154.9
1945-46	183.8	188.0	170.4	158.4
1946-47	222.9	198.9	169.0	152.0
1947-48	191.4	208.2	100.0	146.5
1948-49	154.7	201.1	85.5	84.0
1949-50	194.2	194.4	118.7	62.9
1950-51	213.4	217.4	168.7	96.4

Source: Calculated from data in Tables 3 and 10.

TABLE 22

Yield Per Bearing Acre of California Oranges by Varieties, from 1934-35

Season	Valencia	Navel and miscellaneous
	boxes per bearing acre	
1934-35	221.0	213.9
1935-36	150.0	162.9
1936-37	130.3	149.7
1937-38	220.1	187.8
1938-39	171.8	200.1
1939-40	194.0	193.6
1940-41	222.1	216.1
1941-42	212.8	243.3
1942-43	209.8	157.7
1943-44	212.3	232.8
1944-45	261.4	243.1
1945-46	177.3	194.3
1946-47	226.9	216.2
1947-48	180.9	208.8
1948-49	168.2	132.3
1949-50	194.4	193.7
1950-51	231.1	183.8

Source: Calculated from data in Tables 6 and 13.

TABLE 23

California Orange Production, Bearing Acreage, and Yield Per Bearing Acre, from 1919-20

Season	Production		Bearing acreage		Yield	
	1,000 boxes	index[a]	1,000 acres	index[a]	boxes per bearing acre	index[a]
1919-20	16,632	42.8	155.8	70.6	106.8	60.9
1920-21	23,771	61.1	157.8	71.5	150.6	85.8
1921-22	14,021	36.1	163.2	73.9	85.9	48.9
1922-23	21,283	54.7	166.5	75.4	127.8	72.8
1923-24	24,153	62.1	169.7	76.9	142.3	81.1
1924-25	18,506	47.6	173.0	78.4	107.0	61.0
1925-26	24,200	62.2	174.8	79.2	138.4	78.9
1926-27	28,252	72.7	180.8	81.9	156.3	89.1
1927-28	22,737	58.5	182.9	82.8	124.3	70.8
1928-29	39,159	100.7	185.9	84.2	210.6	120.0
1929-30	21,195	54.5	190.1	86.1	111.5	63.5
1930-31	35,179	90.5	192.5	87.2	182.7	104.1
1931-32	34,658	89.1	197.3	89.4	175.7	100.1
1932-33	34,265	88.1	200.4	90.8	171.0	97.4
1933-34	28,439	73.1	197.9	89.6	143.7	81.9
1934-35	45,047	115.9	206.7	93.6	217.9	124.2
1935-36	32,809	84.4	211.1	95.6	155.4	88.5
1936-37	29,827	76.7	215.7	97.7	138.3	78.8
1937-38	45,914	118.1	221.6	100.4	207.2	118.1
1938-39	41,420	106.5	226.3	102.5	183.0	104.3
1939-40	44,425	114.3	229.2	103.8	193.8	110.4
1940-41	50,778	130.6	231.1	104.7	219.7	125.2
1941-42	52,155	134.1	232.1	105.1	224.7	128.0
1942-43	44,329	114.0	233.7	105.8	189.7	108.1
1943-44	51,961	133.6	236.0	106.9	220.2	125.5
1944-45	60,500	155.6	237.8	107.7	254.4	145.0
1945-46	44,010	113.2	239.5	108.5	183.8	104.7
1946-47	53,530	137.7	240.2	108.8	222.9	127.0
1947-48	45,830	117.9	239.4	108.4	191.4	109.1
1948-49	37,010	95.2	239.2	108.3	154.7	88.1
1949-50	41,860	107.7	215.6	97.6	194.2	110.7
1950-51	45,210	116.3	211.9	96.0	213.4	121.6

a/ Indexes calculated. (Average, 1935-36 to 1939-40 = 100.)

Source: Data from Tables 2, 10, and 21.

TABLE 24

Average Size of California-Arizona Oranges by Varieties, Fresh Shipments, from 1924-25

Season	Valencia	Navel and miscellaneous
	oranges per packed box	
1924-25	220	201
1925-26	207	195
1926-27	227	178
1927-28	208	180
1928-29	250	218
1929-30	212	163
1930-31	240	214
1931-32	233	189
1932-33	232	208
1933-34	246	190
1934-35	239	161
1935-36	246	207
1936-37	247	205
1937-38	230	204
1938-39	257	226
1939-40	236	183
1940-41	221	197
1941-42	221	192
1942-43	206	184
1943-44	216	203
1944-45	254	194
1945-46	264	226
1946-47	248	213
1947-48	260	213
1948-49	265	243
1949-50	229	182
1950-51	224	180
Average	235	198

Source: California Fruit Growers Exchange. Statistical Information on the Citrus Fruit Industry, May, 1951.

TABLE 25

Florida Orange Production, Bearing Acreage, and Yield Per Bearing Acre, from 1919-20

Season	Production		Bearing acreage		Yield	
	1,000 boxes	index a/	1,000 acres	index a/	boxes per bearing acre	index a/
1919-20	7,550	36.1	52.8	26.2	143.0	139.2
1920-21	8,700	41.6	57.7	28.6	150.8	146.8
1921-22	7,850	37.6	65.1	32.3	120.6	117.4
1922-23	10,150	48.6	74.0	36.7	137.2	133.6
1923-24	13,150	62.9	87.7	43.5	149.9	146.0
1924-25	10,400	49.8	106.2	52.7	97.9	95.3
1925-26	9,500	45.5	109.2	54.2	87.0	84.7
1926-27	10,100	48.3	123.5	61.3	81.8	79.6
1927-28	8,650	41.4	126.2	62.6	68.5	66.7
1928-29	15,000	71.8	129.3	64.2	116.0	113.0
1929-30	8,950	42.8	133.0	66.0	67.3	65.5
1930-31	16,800	80.4	140.0	69.5	120.0	116.8
1931-32	12,200	58.4	155.0	76.9	78.7	76.6
1932-33	14,500	69.4	169.0	83.9	85.8	83.5
1933-34	15,900	76.1	178.6	88.6	89.0	86.7
1934-35	15,600	74.6	187.3	93.0	83.3	81.1
1935-36	15,900	76.1	195.7	97.1	81.2	79.1
1936-37	19,100	91.4	202.4	100.4	94.4	91.9
1937-38	23,900	114.4	208.5	103.5	114.6	111.6
1938-39	29,900	143.1	213.5	106.0	140.0	136.3
1939-40	25,600	122.5	216.2	107.3	118.4	115.3
1940-41	28,600	136.8	226.0	112.2	126.5	123.2
1941-42	27,200	130.1	236.0	117.1	115.3	112.3
1942-43	37,200	178.0	246.3	122.2	151.0	147.0
1943-44	46,200	221.1	251.3	124.7	183.8	179.0
1944-45	42,800	204.8	256.3	127.2	167.0	162.6
1945-46	49,800	238.3	264.9	131.5	188.0	183.1
1946-47	53,700	256.9	270.0	134.0	198.9	193.7
1947-48	58,400	279.4	280.5	139.2	208.2	202.7
1948-49	58,300	278.9	289.9	143.7	201.1	195.8
1949-50	58,500	279.9	300.9	149.3	189.0	184.0
1950-51	67,300	322.0	309.5	153.6	217.4	211.7

a/ Indexes calculated. (Average, 1934-35 to 1938-39 = 100.)

Source: U.S. Bureau of Agricultural Economics. Citrus Fruits, Production, Farm Utilization, Value, and Utilization of Sales, October, 1945, and 1947, and subsequent annual issues.

TABLE 26

Utilization of Oranges, California and United States, from 1919-20

Season	Fresh sales			Fruit processed		
	United States	California	Per cent California was of United States a/	United States	California	Per cent California was of United States a/
	1,000 boxes		per cent	1,000 boxes		per cent
1919-20	23,882	16,285	68.2	189	189	100
1920-21	32,034	23,262	72.6	347	347	100
1921-22	21,516	13,554	63.0	310	310	100
1922-23	31,398	21,022	67.0	90	90	100
1923-24	36,893	23,479	63.6	500	500	100
1924-25	28,160	17,768	63.1	565	565	100
1925-26	33,553	23,876	71.2	137	137	100
1926-27	37,712	27,419	72.7	643	643	100
1927-28	31,311	22,356	71.4	188	188	100
1928-29	51,782	36,444	70.4	2,516	2,516	100
1929-30	29,918	20,346	68.0	647	647	100
1930-31	50,190	32,940	65.6	2,035	2,035	100
1931-32	44,926	31,955	71.1	2,532	2,496	98.6
1932-33	46,579	31,429	67.5	2,688	2,627	97.7
1933-34	42,844	26,409	61.6	899	842	93.7
1934-35	56,134	39,747	70.8	3,956	3,668	92.7
1935-36	46,925	30,246	64.5	1,942	1,728	89.0
1936-37	43,388	22,590	52.1	6,591	5,998	91.0
1937-38	64,359	39,797	61.8	5,830	4,686	80.4
1938-39	65,468	33,395	51.0	6,058	4,856	80.2
1939-40	64,285	40,024	62.3	7,238	2,933	40.5
1940-41	73,763	43,423	58.9	9,848	5,801	58.9
1941-42	72,433	44,020	60.8	11,442	7,141	62.4
1942-43	74,167	36,015	48.6	13,955	7,428	53.2
1943-44	88,320	45,234	51.2	16,841	5,665	33.6
1944-45	86,576	48,928	56.5	24,222	9,719	40.1
1945-46	75,697	36,022	47.6	27,246	7,025	25.8
1946-47	80,616	42,069	52.2	30,703	10,290	33.5
1947-48	68,705	35,443	51.6	40,110	9,198	22.9
1948-49	58,191	23,463	40.3	39,916	12,434	31.2
1949-50	53,213	27,558	51.8	48,626	13,176	27.1
1950-51	59,240	31,247	52.7	56,078	12,928	23.1

a/ Percentages calculated.

Source: U. S. Bureau of Agricultural Economics, Citrus Fruits, Production, Farm Disposition, Value and Utilization of Sales, Washington, D. C., October, 1945, 1947, 1948, 1949, 1950, and 1951.

TABLE 27

Oranges, Per Cent of State Total Production Processed by States, - from 1934-35

Season	California	Florida	Arizona	Texas
1934-35	8.2	1.7	1.8	--
1935-36	5.3	1.3	0.4	--
1936-37	20.1	2.9	17.7	0.2
1937-38	10.2	4.6	0.6	2.3
1938-39	11.7	4.0	0.5	0.6
1939-40	6.6	16.7	1.0	1.2
1940-41	11.4	14.0	4.5	0.6
1941-42	13.7	15.7	1.7	0.7
1942-43	16.8	17.3	10.3	0.5
1943-44	10.9	23.8	10.5	1.2
1944-45	16.1	33.5	6.4	1.7
1945-46	16.0	38.6	9.5	7.5
1946-47	19.2	37.0	16.2	6.5
1947-48	20.1	52.1	23.3	5.8
1948-49	33.6	46.1	31.7	11.7
1949-50	31.5	59.3	57.9	9.4
1950-51	28.6	62.3	15.0	38.0

Source: Calculated from data in Tables 3 and 26 and from U. S. Bureau of Agricultural Economics. Citrus Fruits, Production, Farm Distribution, Value, and Utilization of Sale, Washington, D.C., October 1945, 1947, 1948, 1949, 1950, and 1951.

TABLE 28

California and Florida Fresh Orange Utilization, by Variety, Actual Amount and Per Cent of Total State Production of That Variety, from 1934-35

Season	California				Florida			
	Valencias		Navel and miscellaneous		Valencias		Early and midseason	
	000 packed boxes	per cent of total[a]	000 packed boxes	per cent of total[a]	000 packed boxes	per cent of total[a]	000 packed boxes	per cent of total[a]
1934-35	22,232	85.3	17,515	92.2	4,675	95.4	10,468	97.8
1935-36	16,630	90.7	13,616	94.1	6,115	97.1	9,391	97.8
1936-37	11,414	68.8	11,176	84.4	7,024	94.9	11,308	96.6
1937-38	24,209	82.8	15,588	93.5	9,701	92.4	12,830	95.7
1938-39	18,450	78.7	14,945	83.2	11,675	91.6	16,724	97.5
1939-40	23,484	87.3	16,540	94.4	6,593	65.9	14,487	92.9
1940-41	25,618	82.0	17,805	91.1	10,154	81.9	14,218	87.8
1941-42	24,872	82.4	19,148	87.1	9,926	82.7	12,827	84.4
1942-43	24,208	80.5	11,807	83.9	14,868	82.1	15,684	82.1
1943-44	27,020	87.5	18,214	86.4	14,220	69.7	20,669	80.1
1944-45	29,560	77.0	19,368	87.6	12,256	58.1	15,930	73.4
1945-46	20,378	77.4	15,644	88.5	13,845	56.7	16,435	64.7
1946-47	24,564	72.5	17,505	89.0	13,204	56.9	19,360	63.5
1947-48	19,497	72.4	15,946	84.4	12,666	46.2	14,913	48.1
1948-49	14,367	57.2	9,096	76.4	14,585	55.4	16,463	51.4
1949-50	14,555	55.5	13,003	83.2	10,626	42.7	12,767	38.0
1950-51	18,100	59.2	13,147	90.0	10,456	34.3	14,479	39.3

a/ Percentages calculated.

Source: U. S. Bureau of Agricultural Economics, Citrus Fruits, Production, Farm Disposition, Value and Utilization of Sales, October 1945, October 1947 and subsequent Annual Issues.

TABLE 29

California and Florida Process Orange Utilization by Variety, Actual Amount and Per Cent of Total State Production of That Variety, from 1934-35

Season	California				Florida			
	Valencias		Navel and miscellaneous		Valencias		Early and midseason	
	000 packed boxes	per cent of total[a]	000 packed boxes	per cent of total[a]	000 packed boxes	per cent of total[a]	000 packed boxes	per cent of total[a]
1934-35	2,994	11.5	694	3.7	165	3.4	100	1.0
1935-36	1,240	6.8	488	3.4	113	1.8	100	1.0
1936-37	4,537	27.3	1,461	11.0	291	3.9	259	2.2
1937-38	4,015	13.7	671	4.0	679	6.5	430	3.2
1938-39	3,704	15.8	1,152	6.4	944	7.4	240	1.4
1939-40	2,473	9.2	460	2.6	3,307	33.1	963	6.2
1940-41	4,901	15.7	900	4.6	2,146	17.3	1,862	11.5
1941-42	4,777	15.8	2,364	10.8	1,997	16.6	2,274	15.0
1942-43	5,425	18.0	2,003	14.1	3,142	17.4	3,297	17.3
1943-44	3,351	10.9	2,314	11.0	6,055	29.7	4,956	19.2
1944-45	7,627	19.9	2,092	9.5	8,704	41.3	5,640	26.0
1945-46	5,428	20.6	1,597	9.0	10,405	42.6	8,815	34.7
1946-47	8,717	25.7	1,573	8.0	9,846	42.4	10,040	32.9
1947-48	6,872	25.5	2,326	12.3	14,559	53.1	15,862	51.2
1948-49	10,217	40.7	2,217	18.6	11,540	43.9	15,312	47.9
1949-50	11,270	43.0	1,906	12.2	14,099	56.6	20,608	61.3
1950-51	11,875	38.8	1,053	7.2	19,844	65.1	22,071	60.0

a/ Percentages calculated.

Source: U. S. Bureau of Agricultural Economics, Citrus Fruits, Production, Farm Disposition, Value and Utilization of Sales, October 1945, October 1947 and subsequent Annual Issues.

TABLE 30

California-Arizona Oranges, Fresh Shipments by Months, from 1934-35

Season	Month												Total November-October
	November	December	January	February	March	April	May	June	July	August	September	October	
	1,000 boxes												
1934-35	2,354	2,608	3,000	3,003	3,498	4,250	4,058	3,325	3,722	2,987	2,840	2,749	38,394
1935-36	2,193	2,397	1,811	1,991	2,710	3,236	3,297	3,598	3,461	2,649	2,750	1,768	31,861
1936-37	2,198	2,406	1,436	1,489	2,191	2,020	2,058	2,142	2,161	1,867	1,905	930	22,803
1937-38	1,626	2,495	2,212	2,795	2,908	3,515	4,174	3,878	3,898	3,570	3,375	2,870	37,316
1938-39	1,965	2,465	2,258	2,141	2,870	3,365	2,764	2,839	2,798	3,065	3,008	2,585	32,103
1939-40	2,107	2,429	2,158	2,611	3,589	3,870	3,696	4,239	3,652	3,827	3,399	3,576	39,153
1940-41	2,141	3,217	3,153	2,923	3,490	3,552	4,030	3,538	4,108	4,036	3,684	3,389	41,261
1941-42	3,207	2,908	3,700	3,050	3,918	3,868	4,188	4,551	4,653	4,111	3,823	3,008	45,075
1942-43	1,453	2,895	2,452	2,083	2,663	2,445	3,862	4,309	4,781	4,631	3,555	2,319	37,448
1943-44	1,620	3,843	3,281	2,813	3,732	3,727	4,742	4,657	5,226	5,343	4,166	2,841	45,991
1944-45	732	3,791	3,291	3,310	3,699	4,475	5,184	5,700	5,592	4,454	4,779	3,708	48,715
1945-46	2,539	3,434	3,261	3,295	2,732	2,979	3,825	3,854	3,449	3,819	3,107	1,780	38,074
1946-47	1,780	3,500	3,082	3,017	3,423	3,422	3,875	3,550	3,574	4,473	3,929	3,847	41,472
1947-48	3,216	2,668	2,907	2,564	2,873	2,802	3,422	3,083	3,537	3,629	3,319	2,436	36,456
1948-49	1,242	2,347	1,540	1,401	1,696	1,473	1,638	2,271	2,889	2,644	2,302	2,292	23,735
1949-50	2,076	2,080	1,880	1,846	2,331	2,459	2,721	2,876	2,974	2,790	2,499	1,693	28,225
1950-51	854	2,270	2,097	2,258	2,948	3,055	3,404	2,996	2,749	3,007	3,058	2,365	31,061

Source: California Fruit Growers Exchange, Statistical Information on the Citrus Fruit Industry, May, 1951, and supplement.

TABLE 31

California-Arizona Fresh Orange Shipments as Per Cent of Monthly Average Fresh Shipments for Each Year and as a Seasonal Index, from 1934-35

Season	No-vember	De-cember	Janu-ary	Febru-ary	March	April	May	June	July	August	Sep-tember	Octo-ber	Average
1934-35	73.57	81.51	93.76	93.86	109.33	132.83	126.83	103.92	116.33	93.36	88.76	85.92	100
1935-36	82.60	90.28	68.21	74.99	102.07	121.88	124.18	135.51	130.35	99.77	103.57	66.59	100
1936-37	115.67	126.61	75.57	78.36	115.30	106.30	108.30	112.72	113.72	98.25	100.25	48.94	100
1937-38	52.29	80.23	71.13	89.88	93.51	113.03	134.23	124.71	125.35	114.80	108.53	92.29	100
1938-39	73.45	92.14	83.66	80.03	107.28	125.78	103.32	106.12	104.59	114.57	112.44	96.63	100
1939-40	64.58	74.45	66.14	80.02	110.00	118.61	113.28	129.92	111.93	117.29	104.18	109.60	100
1940-41	62.27	93.56	91.70	85.01	101.50	103.30	117.21	102.90	119.47	117.38	107.14	98.56	100
1941-42	85.38	79.81	98.50	81.20	104.31	102.98	111.49	121.16	123.87	109.44	101.78	80.08	100
1942-43	46.56	92.77	78.57	66.75	85.33	78.35	123.76	138.08	153.20	148.40	113.92	74.31	100
1943-44	42.27	100.27	85.61	73.40	97.38	97.25	123.73	121.51	136.36	139.41	108.70	74.13	100
1944-45	18.03	93.38	81.07	81.54	91.12	110.23	127.70	140.41	137.75	109.72	117.72	91.34	100
1945-46	80.02	108.23	102.78	103.85	86.11	93.89	120.55	121.47	108.70	120.37	97.93	56.10	100
1946-47	51.50	101.27	89.18	87.30	99.05	99.02	112.12	102.72	103.41	129.43	113.69	111.31	100
1947-48	105.86	87.82	95.69	84.40	94.57	92.23	112.64	101.48	116.43	119.45	109.25	80.18	100
1948-49	62.79	118.66	77.86	70.83	85.75	74.47	82.81	114.82	146.06	133.68	116.39	115.88	100
1949-50	88.26	88.43	79.93	78.48	99.10	104.55	115.68	122.27	126.44	118.62	106.25	71.98	100
1950-51	32.99	87.70	81.02	87.23	113.89	118.03	131.51	115.75	106.20	116.17	118.14	91.37	100
Index	66.9	93.9	83.6	82.2	99.7	105.5	117.0	118.6	122.4	117.6	107.6	85.0	1,200

Source: Calculated from data in Table 30.

TABLE 32

Florida Fresh Orange Shipments by Months, from 1940-41[a/]

Season	November	December	January	February	March	April	May	June	July	August	September	October	Total
	boxes												
1940-41	2,565,244	3,419,413	3,494,285	2,730,613	3,148,681	2,575,169	2,697,538	1,541,992	301,641			419,905	22,894,481
1941-42	2,050,147	2,982,737	2,954,570	2,717,403	3,204,225	2,980,513	2,724,764	1,207,753	139,936			209,144	21,171,192
1942-43	2,506,816	3,710,040	3,207,041	3,579,307	5,227,268	4,562,425	3,303,562	1,694,678	224,508			430,307	28,445,972
1943-44	4,495,443	4,189,550	3,741,480	3,927,098	4,392,275	4,399,761	4,094,199	2,415,756	461,562			610,943	32,728,067
1944-45	3,559,318	4,307,996	3,343,758	3,875,680	4,140,899	3,250,635	1,500,140	174,673	29,263		30,475	1,794,464	26,007,301
1945-46	3,010,897	3,851,756	3,520,127	3,388,460	3,901,579	4,336,020	2,939,733	1,327,894	42,007		5,542	1,509,167	27,833,182
1946-47	3,362,636	4,075,720	3,818,067	3,103,737	4,289,641	3,472,093	3,057,710	2,158,122	316,011		9,479	2,348,116	30,011,332
1947-48	2,460,272	3,589,840	3,047,990	3,210,265	3,455,941	3,068,116	3,038,948	2,120,728	424,481			670,455	25,087,036
1948-49	2,703,330	3,766,046	3,947,222	3,615,338	4,107,490	3,703,951	3,295,224	1,306,482	86,114		46,203	1,716,124	28,293,524
1949-50	2,668,499	3,403,863	2,503,858	2,089,679	2,621,857	2,434,377	2,489,573	1,383,246	103,556		569	745,961	20,445,038
1950-51	2,691,080	3,318,966	2,453,509	2,580,664	2,784,675	2,376,900	2,234,339	1,473,485	437,262		18,863	1,102,992	21,472,735

a/ Includes interstate, intrastate, and export shipments.

Source: Growers Administrative Committee, marketing policies, Florida citrus.

TABLE 33

Florida Fresh Orange Shipments as Per Cent of Monthly Average Fresh Shipments for Each Year, 1940-41 to 1950-51 and as Seasonal Index, 1940-41 to 1946-47

Season	November	December	January	February	March	April	May	June	July	August	September	October	Average
1940-41	134.46	179.23	183.15	143.12	165.04	134.98	141.39	80.82	15.81	0.00	0.00	22.01	100.0
1941-42	116.20	169.06	167.47	154.02	181.62	168.94	154.44	68.46	7.93	0.00	0.00	11.85	100.0
1942-43	105.75	156.51	135.29	150.99	220.51	192.47	139.36	71.49	9.47	0.00	0.00	18.15	100.0
1943-44	164.83	153.61	137.18	143.99	161.04	161.32	150.11	88.57	16.92	0.00	0.00	22.40	100.0
1944-45	164.23	198.77	154.28	178.83	191.06	149.99	69.22	8.06	1.35	0.00	1.41	82.80	100.0
1945-46	129.81	166.06	151.77	146.09	168.21	186.94	126.74	57.25	1.81	0.00	0.24	65.07	100.0
1946-47	134.45	162.97	152.67	124.10	171.52	138.83	122.26	86.29	12.64	0.00	0.38	93.89	100.0
1947-48	117.68	171.71	145.80	153.56	165.31	146.76	145.36	101.44	20.30	0.00	0.00	32.07	100.0
1948-49	114.66	159.73	167.41	153.34	174.21	157.09	139.76	55.41	3.65	0.00	1.96	72.79	100.0
1949-50	156.62	199.79	146.96	122.65	153.89	142.88	146.12	81.19	6.08	0.00	0.03	43.78	100.0
1950-51	150.39	185.48	137.11	144.22	155.62	132.83	124.87	82.35	24.44	0.00	1.05	61.64	100.0
Average 1940-41 to 1946-47	135.7	169.5	154.5	148.7	179.9	161.9	129.1	65.8	9.4	0.0	0.3	45.2	100.0
Index	136	169	155	149	180	162	129	66	9	0	0	45	100

TABLE 34

Florida Process Orange Shipments by Months, from 1940-41

Season	November	December	January	February	March	April	May	June	July	August	September	October	Total
	boxes												
1940-41	103,889	296,892	659,383	591,323	611,735	509,754	534,455	509,888	107,259	4,927		410	3,948,915
1941-42	101,736	370,555	778,888	650,310	555,148	675,672	470,836	331,389	87,343			513	4,022,390
1942-43	488,545	546,730	564,616	918,843	1,327,907	1,169,285	962,301	281,962	3,123			21,438	6,284,750
1943-44	168,421	582,594	933,537	1,593,174	2,147,439	1,916,583	2,082,674	1,264,619	217,564	2,808		3,088	10,912,501
1944-45	901,207	1,283,433	2,151,090	2,852,521	3,405,611	2,601,053	905,421	40,072				83,481	14,223,889
1945-46	1,955,087	1,992,627	2,261,177	2,071,109	2,904,804	3,046,079	3,145,258	1,246,823	51,889			508,647	19,183,500
1946-47	1,309,000	1,439,879	2,573,854	3,231,237	4,530,191	2,266,900	2,422,653	1,353,249	195,324	12,986		490,212	19,825,485
1947-48	1,907,554	3,867,442	5,478,782	5,775,663	3,217,303	3,023,488	3,569,240	2,491,590	697,412	39,938		307,918	30,376,330
1948-49	2,229,790	3,298,471	4,795,075	4,699,664	4,223,484	2,966,344	2,788,970	1,082,571	28,965	142	1,858	697,165	26,812,496
1949-50	2,495,656	6,542,860	7,183,158	4,384,677	2,837,567	4,028,626	4,925,763	2,135,221	33,525			90,270	34,657,323
1950-51	2,934,661	5,906,133	6,293,477	5,162,505	3,650,230	4,433,052	6,748,071	5,349,431	987,910		1,079	390,825	41,857,374

Source: Growers Administrative Committee, marketing policies, Florida citrus.

TABLE 35

Florida Process Orange Shipments by Months as Per Cent of Average Monthly Process Shipments, 1940-41 to 1950-51 and as Seasonal Index, 1940-41 to 1946-47[a]

Season	November	December	January	February	March	April	May	June	July	August	September	October	Average
1940-41	31.57	90.22	200.37	179.69	185.89	154.90	168.18	154.95	32.59	1.50	0.00	0.12	100.0
1941-42	30.35	110.55	232.37	194.01	165.62	201.57	140.46	98.86	26.06	0.00	0.00	0.15	100.0
1942-43	93.24	104.40	107.76	175.44	253.56	223.32	183.72	53.88	0.60	0.00	0.00	4.08	100.0
1943-44	18.48	64.08	102.60	175.20	236.16	210.72	229.08	139.08	23.88	0.36	0.00	0.36	100.0
1944-45	76.03	108.28	181.48	240.65	287.31	219.44	76.38	3.38	0.00	0.00	0.00	7.04	100.0
1945-46	122.30	124.65	141.45	129.56	181.71	190.56	196.80	78.00	3.24	0.00	0.00	31.80	100.0
1946-47	79.20	87.12	155.76	195.60	274.20	137.16	146.64	81.96	11.88	0.84	0.00	29.64	100.0
1947-48	75.36	152.76	216.48	228.12	127.08	119.40	141.00	98.40	27.60	1.56	0.00	12.12	100.0
1948-49	99.84	147.60	214.56	210.36	189.00	132.72	124.80	48.48	1.32	0.00	0.12	31.20	100.0
1949-50	86.40	226.56	248.76	151.80	98.28	139.44	170.52	73.92	1.20	0.00	0.00	3.12	100.0
1950-51	84.13	169.32	180.43	148.01	104.65	127.09	193.46	153.36	28.32	0.00	0.03	11.20	100.0
Average 1940-41 to 1946-47	64.5	98.5	160.3	184.3	226.3	191.1	163.1	87.2	14.0	0.4	0.0	10.5	100.0
Seasonal Index	65	99	160	184	226	191	163	87	14	b/	b/	11	

a/ Percentages calculated from data in Table 34.

b/ Negligible amounts.

TABLE 36

California-Arizona Annual Valencia Orange Utilization, 1943-44 to 1950-51

	1943-44		1944-45		1945-46		1946-47		1947-48		1948-49		1949-50		1950-51	
	cars	per cent	cars	per cent	cars	per cent	cars	per cent	cars	per cent	cars	per cent	cars	per cent	cars	per cent
Central-northern California																
Interstate	5,933	72	4,146	66	3,502	66	3,841	54	3,070	59	968	54	1,144	37	2,394	52
Intrastate	856	10	448	7	687	13	391	6	641	12	198	11				
Exports	685	8	764	12	682	13	1,062	15	606	12	89	5	307	10	594	13
By-products	783	9	768	13	404	7	1,594	23	756	15	505	28	1,577	50	1,484	32
Other	40	1	127	2	64	1	155	2	97	2	43	2	85	3	166	3
Total	8,297	100	6,253	100	5,339	100	7,043	100	5,170	100	1,803	100	3,113	100	4,638	100
Southern California																
Interstate	42,543	74	48,118	63	32,664	64	38,706	59	29,863	57	24,310	47	26,525	50	29,822	49
Intrastate	5,647	10	6,204	8	4,953	10	5,839	9	5,080	10	3,436	7				
Exports	2,321	4	4,026	5	1,288	3	2,924	5	2,558	5	1,747	3	3,280	6	5,608	9
By-products	6,507	11	15,739	21	11,346	22	17,266	26	14,086	27	21,113	41	22,515	43	25,033	41
Other	805	1	2,141	3	798	1	827	1	814	1	805	2	524	1	481	1
Total	57,823	100	76,228	100	51,049	100	65,562	100	52,401	100	51,411	100	52,844	100	60,944	100
Arizona-desert valley																
Interstate	595	59	855	62	1,016	68	560	41	191	23	123	20	123	13	1,384	75
Intrastate	205	21	294	21	234	16	303	22	190	23	86	14				
Exports	74	7	197	12	75	5	259	19	41	5	12	2	0	0	100	5
By-products	125	13	69	5	163	11	239	18	233	28	305	49	790	86	327	18
Other	1	0	1	0	3	0	6	0	174	21	90	15	5	1	40	2
Total	1,000	100	1,416	100	1,491	100	1,367	100	829	100	616	100	918	100	1,851	100

Source: Orange Administrative Committee. Annual Summaries and Weekly Market News Bulletin.

TABLE 37

California-Arizona Annual Navel and Miscellaneous Orange Utilization, 1943-44 to 1950-51

	1943-44		1944-45		1945-46		1946-47		1947-48		1948-49		1949-50		1950-51	
	cars	per cent	cars	per cent	cars	per cent	cars	per cent	cars	per cent	cars	per cent	cars	per cent	cars	per cent
Central-northern California																
Interstate	11,545	77	10,750	71	7,501	74	11,793	71	9,706	67	5,992	71	8,018	82	7,999	86
Intrastate	2,243	15	2,332	15	1,674	17	2,229	14	2,612	18	1,358	16				
Exports	420	3	825	6	410	4	1,060	6	636	4	356	4	302	3	326	4
By-products	624	4	766	5	322	3	1,183	7	1,295	9	552	6	1,020	10	569	6
Other	123	1	431	3	177	2	378	2	332	2	218	3	513	5	356	4
Total	14,955	100	15,104	100	10,084	100	16,643	100	14,581	100	8,476	100	9,853	100	9,250	100
Southern California																
Interstate	19,284	67	22,246	69	18,020	65	17,138	68	16,427	64	8,592	51	18,421	79	18,560	86
Intrastate	4,155	14	4,906	15	4,399	16	3,638	14	3,952	15	2,696	16				
Exports	457	1	624	2	1,498	6	1,420	6	955	4	529	3	929	4	866	4
By-products	4,217	15	3,763	12	3,136	11	2,201	9	3,740	14	4,247	25	3,105	13	1,885	9
Other	757	3	839	2	544	2	669	3	795	3	848	5	815	4	219	1
Total	28,870	100	32,378	100	27,597	100	25,066	100	25,869	100	16,912	100	23,270	100	21,530	100
Arizona-desert valley																
Interstate	623	63	675	63	818	67	768	61	476	50	515	54	694	56	1,106	82
Intrastate	255	26	288	27	250	21	263	21	248	26	176	18				
Exports	10	1	11	1	24	2	50	4	56	6	58	6	46	4	46	3
By-products	93	10	101	9	126	10	181	14	162	17	177	18	487	39	172	13
Other	2	0	1	0	0	0	0	0	13	1	37	4	18	1	27	2
Total	983	100	1,076	100	1,218	100	1,262	100	955	100	963	100	1,245	100	1,351	100

Source: Orange Administrative Committee. Annual Summaries and Weekly Market News Bulletin.

TABLE 38

Indexes of California-Arizona Monthly Orange Shipments by District, Variety, and Utilization. Average for Monthly Shipments as a Per Cent of Annual Shipments, 1943-44 to 1950-51

	November	December	January	February	March	April	May	June	July	August	September	October	Total
	per cent												
Central-northern California													
Fresh													
Valencia						17	66	16	1				100
Navel and miscellaneous	19	50	27	4									100
Process													
Valencia					1	15	65	18	1				100
Navel and miscellaneous	10	38	37	12	3								100
Southern California													
Fresh													
Valencia	4						7	17	20	20	18	14	100
Navel and miscellaneous		2	12	23	29	25	9						100
Process													
Valencia	4						4	13	18	24	21	16	100
Navel and miscellaneous		1	10	20	29	28	11	1					100
Arizona-desert valley													
Fresh													
Valencia				2	20	31	35	11	1				100
Navel and miscellaneous	23	47	21	8	1								100
Process													
Valencia				7	27	29	27	9	1				100
Navel and miscellaneous	1	14	52	28	4	1							100

Sources: Calculated from weekly data in Orange Administrative Committee, Weekly Market News Bulletin, and Annual Summaries.

TABLE 39

Estimated Utilization of Total United States Oranges and Tangerines, Fresh Fruit Equivalent, as Per Cent of Total Production, from 1934-35

Season	Fresh	Canned single-strength juice a/	Frozen concentrate	Fresh and frozen single-strength juice	Pasteurized concentrate	Other uses b/
	per cent of total production					
1934-35	90.8	1.1				8.1
1935-36	94.0	1.7				4.3
1936-37	85.0	2.4				12.6
1937-38	89.6	1.4				9.0
1938-39	87.6	1.7				10.7
1939-40	88.1	4.2				7.7
1940-41	86.3	4.7			1.5	7.5
1941-42	85.1	5.3			4.2	5.4
1942-43	83.0	3.9			8.4	4.7
1943-44	82.8	8.1			4.5	4.6
1944-45	76.5	13.6			3.9	6.0
1945-46	72.5	20.8	0.2		1.8	4.7
1946-47	70.5	16.1	0.4		6.1	6.9
1947-48	62.4	21.7	1.8	0.8	6.2	7.1
1948-49	59.1	18.2	10.1	0.8	6.7	5.1
1949-50	52.2	17.[illegible]	19.7	0.6	6.4	4.1
1950-51	51.3	15.7	22.6	0.6	6.5	3.3

a/ Includes orange juice, tangerine juice, and one-half of orange-grapefruit blend juice.

b/ Includes fruit used for citrus salad, segments, feed, oil, meal, bottler's base, dairy base, and fruit produced but not utilized.

Source: California Fruit Growers Exchange. Statistical Information on the Citrus Fruit Industry, May, 1951.

TABLE 40

Estimated Utilization of Total United States Oranges and Tangerines, Fresh Fruit Equivalent, from 1934-35

Season	Fresh	Canned single-strength juice	Frozen concentrate	Other uses	Total
	1,000,000 boxes				
1934-35	58.1	.7		5.2	64.0
1935-36	49.0	.9		2.2	52.1
1936-37	46.3	1.3		6.9	54.5
1937-38	66.6	1.0		6.7	74.3
1938-39	68.8	1.3		8.4	78.5
1939-40	66.7	3.2		5.8	75.7
1940-41	73.8	4.0		7.7	85.5
1941-42	72.4	4.5		8.2	85.1
1942-43	74.2	3.5		11.7	89.4
1943-44	88.3	8.6		9.8	106.7
1944-45	86.6	15.4		11.2	113.2
1945-46	75.7	21.7	.2	6.8	104.4
1946-47	83.5	19.1	.5	15.5	118.6
1947-48	71.4	24.8	2.1	16.2	114.5
1948-49	61.5	18.9	10.5	13.2	104.1
1949-50	56.6	18.4	21.4	12.1	108.5
1950-51	62.4	19.1	27.5	12.6	121.6

Source: California Fruit Growers' Exchange, Statistical Information on the Citrus Fruit Industry, May, 1951. Figures calculated using total production figures and estimated percentages.

TABLE 41

Quantities Purchased at Retail and Retail Prices of Frozen Concentrated Orange Juice, Canned Single-Strength Orange Juice, and Fresh Oranges by Months, January, 1949 to January, 1952

Year and month	Quantities purchased			Prices		
	Frozen concentrated orange juice	Canned single-strength orange juice	Fresh oranges	Frozen concentrated orange juice	Canned single-strength orange juice	Fresh oranges
	1,000 gallons	1,000 cases[a]	1,000 boxes	cents per 6-ounce can	cents per 46-ounce can	cents per dozen
1949						
Jan.	227	2,558	3,390[b]	25.9	25.3[c]	36.4
Feb.	322	2,209	3,493[b]	24.0	26.6[c]	36.0
March	437	2,237	3,285[b]	23.7	28.9[c]	37.6
April	432	1,995	2,909[b]	24.2	31.2[c]	40.3
May	491	1,812	2,319[b]	25.5	33.5[c]	45.8
June	671	1,626	1,789[b]	26.9	38.6[c]	44.2
July	749	1,389	1,333[b]	27.6	41.2[c]	38.9
Aug.	821	1,275	1,399[b]	28.0	41.9[c]	33.3
Sept.	981	1,302	1,684[b]	27.5	42.4[c]	32.5
Oct.	1,076	1,260	1,868	27.3	41.1	36.4
Nov.	1,131	1,137	2,556	25.9	39.6	33.4
Dec.	1,024	1,890	3,633	23.7	30.4	36.1
1950						
Jan.	1,057	1,763	3,032	24.4	32.3	39.8
Feb.	1,089	1,722	2,964	26.4	36.2	43.3
March	1,098	1,570	3,106	27.7	38.4	46.2
April	1,134	1,565	3,002	27.8	39.1	49.2
May	1,243	1,462	2,620	27.2	38.4	49.0
June	1,258	1,365	1,965	26.8	37.8	44.2
July	1,218	1,366	1,622	26.1	37.9	43.0
Aug.	1,308	1,236	1,499	25.7	38.4	41.7
Sept.	1,470	1,215	1,437	25.5	38.4	44.8
Oct.	1,865	1,357	1,686	22.1	37.3	44.4
Nov.	1,762	1,284	2,266	21.7	33.7	39.1
Dec.	1,638	1,272	3,415	21.6	32.1	41.6
1951						
Jan.	1,716	1,368	3,216	21.6	31.5	39.7
Feb.	1,917	1,490	3,083	21.5	32.0	43.3
March	1,872	1,456	3,375	22.1	32.3	46.5
April	1,892	1,403	3,401	21.9	33.2	47.7
May	1,768	1,261	2,796	21.9	33.3	48.6
June	1,775	1,358	2,296	21.6	31.0	42.9
July	1,756	1,775	1,749	21.8	28.1	40.2
Aug.	2,022	2,166	1,478	21.3	25.1	44.6
Sept.	2,470	1,850	1,656	20.7	25.9	46.7
Oct.	2,608	1,728	1,824	20.4	26.7	46.2
Nov.	2,600	1,325	2,693	19.7	28.3	39.0
Dec.	2,619	1,377	3,127	19.1	28.2	40.9
1952						
Jan.	3,060	1,812	3,101	18.2	26.6	40.4

(Continued on next page.)

Table 41 continued.

a/ Equivalent cases of 24 No. 2 cans--432 ounces per case.

b/ From California Fruit Growers Exchange. Statistical Information on the Citrus Fruit Industry, May, 1951.

c/ Prices originally quoted per No. 2 can. Multiplied by $\frac{46}{18}$ (= 2.556)

Source: U. S. Bureau of Agricultural Economics. Consumer Purchases of Selected Fresh Fruits, Canned and Frozen Juices, and Dried Fruits, monthly issues.

TABLE 42

Quantities Purchased at Retail in Juice Equivalent Form and Retail Prices Per Equivalent Juice Gallon of Fresh Oranges, Canned Single-Strength Orange Juice, and Frozen Concentrated Orange Juice, by Months, January 1949 to January 1952

Year and month	Quantities purchased			Prices		
	Fresh	Canned	Frozen	Fresh	Canned	Frozen
	1,000 gallons			dollars per gallon		
	1	2	3	4	5	6
1949						
Jan.	12,711	8,633	908	1.90	.64	1.38
Feb.	13,363	7,455	1,288	1.88	.68	1.28
March	12,478	7,550	1,748	1.96	.73	1.26
April	11,005	6,733	1,728	2.11	.79	1.29
May	8,939	6,115	1,964	2.39	.85	1.36
June	7,200	5,488	2,684	2.31	.98	1.43
July	5,532	4,688	2,996	2.03	1.05	1.47
Aug.	5,668	4,303	3,284	1.74	1.07	1.49
Sept.	6,710	4,394	3,924	1.70	1.08	1.47
Oct.	6,431	4,252	4,304	1.90	1.14	1.46
Nov.	9,254	3,837	4,524	1.75	1.10	1.38
Dec.	13,216	6,379	4,096	1.89	.85	1.26
1950						
Jan.	11,044	5,950	4,228	2.08	.90	1.30
Feb.	10,847	5,812	4,356	2.26	1.01	1.41
March	11,260	5,299	4,392	2.41	1.07	1.48
April	10,863	5,282	4,536	2.57	1.09	1.48
May	9,506	4,934	4,972	2.56	1.07	1.45
June	7,018	4,607	5,032	2.31	1.05	1.43
July	5,577	4,610	4,872	2.25	1.05	1.39
Aug.	5,080	4,171	5,272	2.18	1.07	1.37
Sept.	4,885	4,101	5,880	2.34	1.07	1.36
Oct.	5,871	4,580	7,460	2.32	1.04	1.18
Nov.	8,259	4,333	7,048	2.04	.94	1.16
Dec.	12,747	4,293	6,552	2.17	.89	1.15
1951						
Jan.	11,665	4,617	6,864	2.07	.88	1.15
Feb.	11,201	5,029	7,668	2.26	.89	1.15
March	12,153	4,914	7,488	2.43	.90	1.18
April	12,195	4,735	7,568	2.49	.92	1.17
May	10,047	4,256	7,072	2.54	.93	1.17
June	8,141	4,583	7,100	2.24	.86	1.15
July	6,070	5,991	7,024	2.10	.78	1.16
Aug.	5,021	7,310	8,088	2.33	.70	1.14
Sept.	5,582	6,244	9,880	2.44	.72	1.10
Oct.	6,219	5,832	10,432	2.41	.74	1.09
Nov.	9,654	4,472	10,400	2.04	.79	1.05
Dec.	11,344	4,647	10,476	2.13	.78	1.02
1952						
Jan.	11,323	6,116	12,240	2.11	.74	0.97

(Continued on next page.)

Table 42 continued.

Sources: Calculated from data in Table 41 and U. S. Bureau of Agricultural Economics. Consumer Purchases of Selected Fresh Fruits, Canned and Frozen.

Method of conversion:

Col. 1: Figures for California oranges were converted from "boxes" to "tons" by multiplying by 77 pounds/ box and dividing by 2,000 pounds/ton. For "other" oranges the conversion factor was 90 pounds/box. Total tons were then multiplied by 85 gallons/ton to determine the quantity of juice equivalent to the quantity of oranges utilized fresh.

Col. 2: A conversion factor of 3.375 gallons/case was used.

Col. 3: A conversion factor of 4.0 gallons/gallon was used.

Col. 4: A conversion factor of 5.22 dozen oranges/gallon was used.

Col. 5: 2.78 46-ounce cans/gallon.

Col. 6: 5.33 6-ounce cans/gallon.

TABLE 43

United States Per-Capita Consumption of Fresh Oranges and Fresh Fruit Other Than Citrus, 1924 to 1949

Year	Oranges		Fresh fruit other than citrus[a]	
	pounds			
		5-year average		5-year average
1924	22.9		116.8	
1925	17.4		106.1	
1926	20.6		132.5	
1927	21.9		97.3	
1928	19.5	20.5	119.9	114.5
1929	27.3		103.4	
1930	19.8		102.3	
1931	27.4		120.7	
1932	24.5		91.9	
1933	26.4	25.1	87.8	101.2
1934	26.8		79.8	
1935	30.5		92.2	
1936	29.9		82.9	
1937	26.4		98.0	
1938	33.3	29.4	83.8	87.3
1939	40.9		91.0	
1940	39.2		85.7	
1941	38.7		91.1	
1942	39.6		73.3	
1943	39.5	39.6	59.5	80.1
1944	47.4		74.1	
1945	44.8		76.9	
1946	37.5		79.6	
1947	41.2		81.7	
1948	35.4	41.3	76.7	77.8
1949	30.4		77.6	

a/ Includes "apples" and "total other fresh fruit."

Source: U. S. Bureau of Agricultural Economics, Consumption of Food in the United States 1909-1948, Washington, D. C., August 1949 and Supplement for 1949, September 1950.

TABLE 44

Orange Juice, Canned, Single-Strength,
Annual Packs by Producing Areas,
from 1928-29

Season November-October	California-Arizona pack	Florida pack	Texas pack	Total United States pack
	1,000 cases of 24 No. 2 cans			
1928-29	0	0	0	0
1929-30	0	38	0	38
1930-31	33	61	0	94
1931-32	0	36	0	36
1932-33	35	64	0	99
1933-34	245	58	0	303
1934-35	704	241	0	945
1935-36	874	162	0	1,036
1936-37	912	498	0	1,410
1937-38	234	806	0	1,040
1938-39	337	926	0	1,263
1939-40	744	2,851	0	3,595
1940-41	1,016	3,078	0	4,094
1941-42	1,311	3,466	0	4,777
1942-43	394	2,429	0	2,823
1943-44	1,371	7,075	0	8,446
1944-45	2,842	13,935	0	16,777
1945-46	3,705	18,421	56	22,182
1946-47	2,321	17,294	102	19,717
1947-48	1,500	25,593	165	27,258
1948-49	2,209	16,757	296	19,262
1949-50	1,900	17,419	145	19,464
1950-51	1,607	20,031	870	22,508

Source: U. S. Department of Agriculture, Production and Marketing Administration. Canned Citrus Fruit Juices and Segments, May 1949 and March 1951.

TABLE 45

Blended Orange and Grapefruit Juice, Single Strength, Annual Packs, from 1935-36

Season, November-October	California-Arizona	Florida	Texas	Total United States
	1,000 cases of 24 No. 2 cans			
1935-36		85		85
1936-37		272		272
1937-38		547		547
1938-39		699	18	717
1939-40		1,403	30	1,433
1940-41		2,537	32	2,569
1941-42		2,304	38	2,342
1942-43	1	3,676	25	3,702
1943-44	38	6,176	69	6,283
1944-45	76	7,745	254	8,075
1945-46	568	12,267	626	13,461
1946-47	85	10,034	340	10,459
1947-48	176	11,894	299	12,369
1948-49	348	10,252	229	10,829
1949-50	582	6,768	45	7,395
1950-51	355	8,797	369	9,521

Source: U. S. Production and Marketing Administration, Canned Citrus Fruit Juices and Segments, May 1949 and March 1951; and California-Arizona Citrus Fruit Products, 1950-51 Season Packs and October 1951 Stocks, February 6, 1952.

TABLE 46

Production of Concentrated Orange Juice and Orange Blend, California-Arizona and Florida, from 1940-41 51

Season	Frozen orange concentrate		Canned orange concentrate		Frozen blend concentrate	
	California-Arizona	Florida	California-Arizona	Florida	California-Arizona	Florida
	1,000 gallons					
1940-41	--	--	798	65	--	--
1941-42	--	--	2,226	93	--	--
1942-43	--	--	3,076	1,833	--	--
1943-44	--	--	1,926	1,283	--	--
1944-45	--	--	2,601	240	--	--
1945-46	--	226	938	244	--	--
1946-47	--	559	3,332	1,447	--	--
1947-48	437	1,936	2,928	1,798	--	--
1948-49	1,963	10,233	2,769	1,898	0	112
1949-50	3,490	21,647	3,216	1,529	33	1,303
1950-51	4,180	30,758	3,251	2,529	0	245

Sources: U. S. Department of Agriculture, Production and Marketing Administration, Canned Citrus Fruit Juices and Segments, May, 1949, and March, 1951. For 1951 Florida data--Florida Crop and Livestock Reporting Service, Florida Citrus Fruit, 1951; for 1951 California-Arizona data--U. S. Production and Marketing Administration, California-Arizona Citrus Fruit Products, 1950-51 Season Packs and October 1951 Stocks, February 6, 1952.

TABLE 47

California-Arizona Production of Fresh and Frozen Single-Strength Citrus Juices, from 1945-46

Season November-October	Fresh single-strength juice		Frozen single-strength juice
	Orange	Orange and grapefruit	Orange
	1,000 gallons		
1945-46	1,224	0	733
1946-47	1,149	0	316
1947-48	2,764	0	832
1948-49	2,685	0	528
1949-50	2,314	45	432
1950-51	2,397	0	202

Source: U. S. Department of Agriculture, Production and Marketing Administration, California-Arizona Citrus Fruit Products, Season Packs and October Stocks, Annual Issuea.

TABLE 48

Season Average F.O.B. Price of Fresh Oranges, Per Packed Box, by States, from 1919-20

Season	United States	State			
		California	Arizona	Florida	Texas
	dollars				
1919-20		4.14	3.40	3.63	3.50
1920-21		2.82	3.81	2.49	2.72
1921-22		4.10	3.98	3.45	3.20
1922-23		2.68	3.00	2.86	2.64
1923-24		2.56	2.53	1.78	2.32
1924-25		4.21	3.15	2.99	3.31
1925-26		3.49	4.06	3.40	2.98
1926-27		3.69	4.08	2.64	2.61
1927-28		4.88	4.94	4.12	3.53
1928-29		2.73	3.78	2.04	2.64
1929-30		5.20	4.12	3.10	3.62
1930-31		2.30	2.46	2.23	2.56
1931-32		1.92	1.89	2.28	2.13
1932-33		1.65	1.74	1.62	1.85
1933-34		2.37	1.89	1.84	1.52
1934-35		1.99	1.94	1.87	1.71
1935-36		2.43	2.37	2.24	1.79
1936-37		3.26	2.27	2.48	2.14
1937-38		1.58	1.49	1.53	1.45
1938-39	1.57	1.64	1.59	1.45	1.20
1939-40	1.78	1.84	1.99	1.54	1.70
1940-41	2.05	2.19	2.04	1.60	1.70
1941-42	2.50	2.64	2.13	2.02	2.05
1942-43	3.63	3.89	3.68	3.02	3.10
1943-44	3.84	4.13	3.91	3.04	3.35
1944-45	3.81	3.91	4.04	3.48	3.45
1945-46	4.23	4.52	4.57	3.56	3.40
1946-47	3.04	3.18	4.27	2.62	2.85
1947-48	2.98	3.35	3.20	2.05	2.62
1948-49	3.46	3.89	5.52	2.80	2.47
1949-50	3.63	3.70	2.94	3.51	3.58
1950-51	3.62	3.78	4.32	3.15	2.78

Source: U. S. Bureau of Agricultural Economics. Fruit and Nut Prices, October, 1947, and Fruit Prices (Citrus and Peaches, 1945-1951), October, 1951.

TABLE 49

United States Equivalent "On-Tree" Average Prices of Oranges for Fresh and Processed Uses, by States, from 1919-20

Season	United States		State							
			California		Arizona		Florida		Texas	
	Fresh	Processed	Fresh	Processed	Fresh	Processed	Fresh	Processed	Fresh	Processed
	dollars per packed box									
1919-20	2.94	.17	3.17	.17	2.59	--	2.45	--	2.10	--
1920-21	1.65	.14	1.78	.14	2.95	--	1.29	--	1.40	--
1921-22	2.76	.15	3.05	.15	3.10	--	2.24	--	2.03	--
1922-23	1.77	.19	1.77	.19	2.22	--	1.76	--	1.55	--
1923-24	1.23	.13	1.58	.13	1.76	--	.59	--	1.20	--
1924-25	2.71	.31	3.20	.31	2.31	--	1.86	--	2.05	--
1925-26	2.43	.48	2.52	.48	3.23	--	2.18	--	1.80	--
1926-27	2.37	.29	2.72	.29	3.24	--	1.39	--	1.41	--
1927-28	3.58	1.09	3.88	1.09	4.04	--	2.79	--	2.25	--
1928-29	1.52	.13	1.82	.13	2.95	--	.76	--	1.60	--
1929-30	3.54	.29	4.31	.29	3.27	--	1.79	--	2.52	--
1930-31	1.26	.02	1.36	.02	1.65	--	1.07	--	1.47	--
1931-32	1.15	.03	1.06	.02	1.12	--	1.38	.78	1.19	--
1932-33	.81	.03	.87	.02	.96	--	.67	.33	.96	--
1933-34	1.30	.17	1.55	.16	1.10	--	.91	.37	.63	--
1934-35	1.09	.05	1.18	.02	1.15	--	.88	.49	.81	--
1935-36	1.42	.15	1.55	.08	1.58	--	1.19	.71	.85	--
1936-37	1.88	.30	2.30	.22	1.50	.14	1.43	1.13	1.35	--
1937-38	.74	.00	.77	-.06	.64	--	.68	.26	.82	.50
1938-39	.71	-.03	.80	-.11	.72	--	.62	.28	.53	--
1939-40	.89	.07	1.03	.12	1.08	.91	.62	.03	.83	.43
1940-41	1.13	.48	1.32	.40	.99	.74	.82	.60	.87	.57
1941-42	1.48	.66	1.69	.59	1.03	.52	1.15	.79	1.03	.50
1942-43	2.38	1.59	2.89	1.75	2.44	1.71	1.81	1.40	1.95	1.85
1943-44	2.53	1.54	3.06	1.40	2.65	.56	1.87	1.62	2.22	--
1944-45	2.59	1.71	2.82	1.03	2.84	.67	2.23	2.18	2.29	--
1945-46	2.78	2.10	3.21	1.39	3.28	.98	2.35	2.41	2.21	1.85
1946-47	1.58	.33	1.79	.08	2.88	.45	1.25	.46	1.73	.70

(Continued on next page.)

Table 49 continued.

Season	United States		State							
			California		Arizona		Florida		Texas	
	Fresh	Processed	Fresh	Processed	Fresh	Processed	Fresh	Processed	Fresh	Processed
	dollars per packed box									
1947-48	1.33	.43	1.78	.17	1.53	.23	.76	.52	1.40	.51
1948-49	1.77	1.00	2.20	.40	3.40	.29	1.47	1.29	1.32	.51
1949-50	2.16	1.70	2.15	.67	1.50	.42	2.19	2.12	2.22	1.33
1950-51	1.97	1.29	2.14	.42	2.74	.59	1.76	1.57	1.38	.60

Source: U. S. Bureau of Agricultural Economics. Fruit and Nut Prices, October, 1947, and Fruit Prices (Citrus and Peaches, 1945-1951), October, 1951.

TABLE 50

Equivalent "On-Tree" Prices of California Oranges, by Variety and Utilization, from 1919-20

Season	Fresh use		Processed uses	
	Valencias	Navels and miscellaneous	Valencias	Navels and miscellaneous
	dollars			
1919-20	3.56	2.90	.17	.17
1920-21	2.23	1.40	.17	.13
1921-22	3.37	2.81	.12	.17
1922-23	1.84	1.71	.19	.19
1923-24	2.23	1.12	.13	.13
1924-25	4.15	2.65	.37	.27
1925-26	2.50	2.55	.48	.48
1926-27	3.02	2.42	.29	.29
1927-28	4.59	3.31	1.09	1.09
1928-29	1.82	1.82	.13	.13
1929-30	5.01	3.60	.29	.29
1930-31	1.38	1.34	.02	.02
1931-32	1.05	1.08	.02	.02
1932-33	1.04	.68	.02	.02
1933-34	1.95	1.02	.17	.12
1934-35	1.30	1.03	.02	.02
1935-36	1.85	1.19	.07	.11
1936-37	2.78	1.81	.25	.14
1937-38	.81	.71	-.07	-.03
1938-39	.96	.60	-.11	-.11
1939-40	1.14	.87	.12	.10
1940-41	1.55	.98	.44	.20
1941-42	2.26	.94	.72	.34
1942-43	3.08	2.51	1.95	1.20
1943-44	3.32	2.68	1.75	.90
1944-45	2.81	2.84	1.02	1.06
1945-46	3.52	2.82	1.76	.12
1946-47	1.51	2.17	.13	-.22
1947-48	1.94	1.59	.31	-.25
1948-49	1.91	2.67	.56	-.35
1949-50	2.13	2.17	.77	.07
1950-51	1.98	2.36	.45	.06

Source: Bureau of Agricultural Economics. Fruit and Nut Prices, October, 1947, and Fruit Prices (Citrus and Peaches, 1945-1951), October, 1951.

TABLE 51

California-Arizona F.O.B. Prices
of Winter and Summer Fresh Oranges, from 1924-25

Season	F.o.b. price	
	Summer oranges[a]	Winter oranges[a]
	dollars per box	
1924-25	5.26	3.60
1925-26	3.59	3.50
1926-27	4.11	3.45
1927-28	5.74	4.39
1928-29	2.69	2.80
1929-30	5.87	4.45
1930-31	2.27	2.17
1931-32	1.82	1.80
1932-33	1.78	1.43
1933-34	2.73	1.65
1934-35	2.01	1.80
1935-36	2.61	1.95
1936-37	3.64	2.53
1937-38	1.57	1.46
1938-39	1.78	1.38
1939-40	1.89	1.60
1940-41	2.36	1.80
1941-42	2.99	1.82
1942-43	4.06	3.58
1943-44	4.39	3.73
1944-45	3.90	3.90
1945-46	4.80	4.13
1946-47	2.94	3.60
1947-48	3.44	3.02
1948-49	3.55	4.27
1949-50	3.62	3.56
1950-51	3.69	3.92

a/ Summer: May through October, mainly Valencias.
Winter: November through April, mainly navels and miscellaneous.

Source: California Fruit Growers Exchange. Statistical Information on the Citrus Fruit Industry, May, 1951.

TABLE 52

California and Florida Average Auction Price of Oranges, Ten Cities, from 1925-26

Season	California oranges	Florida oranges	California price minus Florida price
	dollars per box		
1925-26	4.79	4.61	+ .18
1926-27	4.84	3.81	+1.03
1927-28	5.62	5.62	0
1928-29	4.38	3.15	+1.23
1929-30	5.69	4.62	+1.07
1930-31	3.82	3.40	+ .42
1931-32	3.25	3.30	- .05
1932-33	2.94	2.44	+ .50
1933-34	3.14	2.70	+ .44
1934-35	3.27	2.56	+ .71
1935-36	3.34	3.00	+ .34
1936-37	4.07	3.21	+ .86
1937-38	3.12	2.24	+ .88
1938-39	2.82	2.09	+ .73
1939-40	3.07	2.35	+ .72
1940-41	3.15	2.35	+ .80
1941-42	3.58	2.83	+ .75
1942-43	5.23	3.79	+1.44
1943-44	5.15	3.89	+1.26
1944-45	5.37	4.48	+ .89
1945-46	5.31	4.58	+ .73
1946-47	4.67	3.50	+1.17
1947-48	4.68	3.27	+1.41
1948-49	5.75	4.23	+1.52
1949-50	5.04	4.85	+ .19
1950-51	5.43	4.29	+1.14

Source: California Fruit Growers Exchange. Statistical Information on the Citrus Fruit Industry, May, 1951.

TABLE 53

Cultural Costs of Production, California Oranges by Varieties, from 1924-25, and Florida Oranges, from 1927-28

Season	Cultural costs per packed box		
	California navels and miscellaneous	California Valencias	Florida total
	dollars		
1924-25	1.28	1.97	
1925-26	1.32	1.27	
1926-27	1.23	1.23	
1927-28	1.48	1.78	.72
1928-29	.94	1.05	.72
1929-30	1.65	1.87	.80
1930-31	.92	.96	.48
1931-32	.76	.76	.60
1932-33	.65	.64	.47
1933-34	.80	.91	.46
1934-35	.59	.56	.45
1935-36	.77	.98	.45
1936-37	1.05	1.13	.42
1937-38	.65	.62	.38
1938-39	.53	.61	.34
1939-40	.51	.47	.42
1940-41	.46	.47	.40
1941-42	.49	.59	.44
1942-43	.90	.75	.40
1943-44	.80	.86	.50
1944-45	.83	.79	.50
1945-46	1.13	1.33	.48
1946-47	1.04	1.00	.53
1947-48	.98	1.25	.50
1948-49	1.61	1.25	.50
1949-50	1.05	1.11	.52
1950-51	1.15	1.10	.57

Source: California Fruit Growers Exchange. 1952 Supplement, Statistical Information on the Citrus Fruit Industry, May, 1951.

TABLE 54

Cost of Picking, Hauling, Packing, and Selling California and Florida Oranges, from 1924-25

Season	All packed oranges	
	California	Florida
	dollars per packed box equivalent	
1924-25	.92	--
1925-26	.87	--
1926-27	.86	--
1927-28	.88	1.30
1928-29	.84	1.28
1929-30	.86	1.30
1930-31	.85	1.10
1931-32	.75	.95
1932-33	.71	.90
1933-34	.73	.87
1934-35	.71	.90
1935-36	.74	.95
1936-37	.83	.93
1937-38	.73	.88
1938-39	.77	.84
1939-40	.72	.91
1940-41	.76	.87
1941-42	.89	.90
1942-43	.98	1.01
1943-44	1.04	1.25
1944-45	1.07	1.21
1945-46	1.27	1.24
1946-47	1.33	1.25
1947-48	1.45	1.32
1948-49	1.56	1.40
1949-50	1.51	1.38
1950-51	1.53	1.40

Sources: California Fruit Growers Exchange, Statistical Information on the Citrus Fruit Industry, May, 1951, and Sunkist Growers, 1952 Supplement, May, 1952.

TABLE 55

Estimated Detailed F.O.B. Cost of California Oranges, from 1923

Cost item[a]	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932
	dollars									
Commercial fertilizer	36.59	18.29	28.05	41.40	32.02	35.36	31.59	31.86	20.37	17.22
Barnyard fertilizer	27.03	28.24	33.13	22.52	35.75	43.15	36.21	43.13	26.38	12.22
Water	21.60	23.12	26.83	29.20	27.68	30.52	29.73	30.56	28.65	26.28
Fumigating	17.46	14.03	12.35	16.99	14.86	12.77	10.46	13.21	9.02	6.64
Spraying	3.92	5.81	10.19	7.28	9.93	14.51	13.48	9.38	9.08	10.54
Other pest control	2.94	.73	.88	.99	--	--	--	--	--	--
Frost protection materials	2.33	3.16	4.52	3.08	3.30	4.74	5.80	5.38	5.36	3.44
Frost protection labor	.51	.38	.78	1.41	1.09	1.20	1.03	1.13	1.53	2.03
Cultivating labor (including team and tractor)	67.56	65.02	67.35	65.63	61.64	63.47	59.66	59.28	50.52	39.07
Irrigating labor	3.63	3.09	2.85	2.92	2.60	2.77	6.71	5.06	4.09	4.33
Pruning and tree care	5.50	5.07	6.89	9.64	10.55	10.22	6.84	8.04	7.29	4.91
Other materials	1.46	.69	.61	1.39	1.14	1.32	1.15	.57	.49	.33
Other labor	1.31	.53	.89	.69	1.52	1.04	4.40	2.43	2.32	.95
General expense (including administration)	9.44	12.16	12.46	13.73	17.15	16.68	15.72	16.97	15.30	10.38
Taxes	22.69	22.33	21.35	21.08	21.59	22.44	25.10	24.49	24.85	22.64
Insurance	1.26	1.10	.90	1.17	1.26	1.49	1.88	2.20	2.11	1.40
Maintenance and repairs	6.43	5.61	4.53	4.25	4.09	3.57	4.21	5.04	4.44	2.73
Depreciation	12.12	13.48	10.50	12.31	12.12	12.90	15.69	14.96	14.31	12.80
Total cultural cost per acre	243.78	222.84	245.06	255.60	258.28	278.15	269.65	273.49	226.08	177.91
Yield (packed box per acre)	179.1	191.0	154.0	193.7	204.1	169.9	252.8	150.8	226.1	215.3
Cultural cost per packed box	1.361	1.166	1.591	1.320	1.265	1.637	1.067	1.813	1.000	.826
Picking per packed box	.125	.139	.142	.132	.127	.124	.138	.121	.118	.102
Hauling per packed box	.044	.044	.047	.045	.046	.047	.045	.044	.043	.040
Packing per packed box	.584	.588	.596	.592	.556	.576	.544	.567	.538	.465
Selling and advertising	.106	.113	.128	.112	.118	.132	.117	.130	.132	.115
Total f.o.b. cost per packed box	2.22	2.05	2.50	2.20	2.11	2.52	1.91	2.68	1.83	1.55

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Table 55 continued.

Cost item[a]	1933	1934	1935	1936	1937	1938	1939	1940	1941	1942
	dollars									
Commercial fertilizer	11.45	14.85	16.55	15.64	16.98	15.44	12.48	12.19	13.83	17.00
Barnyard fertilizer	10.24	14.90	16.55	17.95	17.02	8.20	7.18	8.76	11.08	15.75
Water	22.99	24.72	21.80	22.48	20.86	18.89	19.71	19.06	13.89	18.44
Fumigating	4.83	7.98	8.47	9.36	7.41	7.10	8.40	3.41	6.63	3.82
Spraying	10.49	11.97	11.50	10.77	10.99	11.61	9.34	5.47	15.26	20.70
Other pest control	--		1.53	1.68	2.02	2.10	3.29	3.49	2.04	2.39
Frost protection materials	2.18	.99	2.42	2.65	19.74	1.45	1.60	1.57	2.20	3.45
Frost protection labor	1.24	.94	1.00	.98	7.09	.96	1.25	.94	1.30	2.43
Cultivating labor (including team and tractor)	27.37	31.79	33.16	30.53	30.56	26.54	24.04	22.76	11.96	16.14
Irrigating labor	7.76	6.98	6.62	7.99	9.35	9.29	8.58	7.04	7.00	10.41
Pruning and tree care	4.24	5.23	6.45	7.31	5.64	3.94	2.77	2.64	4.69	4.47
Other materials	.27	.26	.24	.35	.08	.12	.12	.14	1.54	2.56
Other labor	2.35	.99	.96	.58	2.65	4.30	2.27	2.74	5.57	5.49
General expense (including administration)	12.16	10.16	11.33	15.55	13.80	12.83	13.05	9.70	7.42	10.17
Taxes	17.95	15.18	14.85	14.68	16.50	16.96	17.02	10.91	17.11	16.87
Insurance	1.49	1.14	1.25	1.70	1.63	1.83	1.78	1.38	.87	1.07
Maintenance and repairs	2.07	2.37	2.31	3.34	4.90	3.85	2.98	2.67	2.42	2.01
Depreciation	11.20	7.48	7.53	9.00	8.53	9.21	9.56	8.59	8.86	9.02
Total cultural cost per acre	149.93	157.91	164.50	172.54	195.75	154.60	145.52	123.46	133.67	162.19
Yield (packed box per acre)	214.5	173.6	253.0	180.7	137.3	216.8	229.1	230.2	245.0	250.0
Cultural cost per packed box	.699	.909	.650	.955	1.426	.713	.635	.536	.550	.650
Picking per packed box	.085	.097	.103	.111	.126	.114	.116	.108	.12	.16
Hauling per packed box	.035	.036	.036	.036	.038	.033	.035	.034	.03	.04
Packing per packed box	.430	.466	.429	.440	.490	.416	.435	.417	.44	.52
Selling and advertising	.118	.111	.119	.110	.136	.125	.116	.117	.12	.11
Total f.o.b. cost per packed box	1.37	1.62	1.34	1.65	2.22	1.40	1.34	1.21	1.26	1.48

(Continued on next page.)

Table 55 continued.

Cost item[a]	1943	1944	1945	1946	1947	1948	1949	1950
	dollars							
Commercial fertilizer	19.01	28.00	27.75	29.75	29.05	27.24	27.02	29.82
Barnyard fertilizer	25.25	46.42	42.67	36.57	30.79	23.59	21.90	28.64
Water	19.41	23.25	26.23	24.93	26.09	27.36	28.46	26.84
Fumigating	3.81	36.79	39.09	35.65	40.02	25.72	15.74	40.84
Spraying	21.37	26.24	31.95	32.93	35.04	30.51	33.13	33.94
Other pest control	2.85	10.07	9.87	11.13	12.54	5.82	4.99	4.01
Frost protection materials	4.02	9.79	12.31	13.81	16.79	35.49	58.82	36.30
Frost protection labor	1.85	3.28	8.22	11.21	10.20	15.35	20.26	17.86
Cultivating labor (including team and tractor)	17.02	18.76	21.17	22.35	26.05	26.73	25.78	23.35
Irrigating labor	13.54	14.47	17.16	17.88	19.12	20.46	18.68	18.12
Pruning and tree care	7.39	17.04	23.95	19.33	13.24	9.97	10.07	10.44
Other materials	2.52	4.12	6.02	6.24	7.01	4.18	2.98	3.83
Other labor	7.09	19.18	19.96	23.65	24.06	15.33	13.84	11.89
General expense (including administration)	11.92	16.87	23.50	25.55	15.91	21.48	20.47	25.35
Taxes	15.94	13.71	18.13	21.49	23.47	24.55	24.09	25.47
Insurance	1.35	2.07	2.43	2.95	3.04	3.43	2.96	2.67
Maintenance and repairs	2.48	8.74	10.00	12.05	10.72	7.90	12.16	9.45
Depreciation	9.31	11.10	11.12	12.75	12.95	13.27	12.69	13.45
Total cultural cost per acre	186.13	228.41	226.25	279.42	276.72	261.77	277.55	259.58
Yield (packed box per acre)	226.0	271.0	330.0	223.0	275.0	231.0	205.0	241.0
Cultural cost per packed box	.82	.84	.81	1.25	1.01	1.13	1.35	1.08
Picking per packed box	.23	.24	.26	.29	.26	.29	.30	.29
Hauling per packed box	.05	.05	.05	.06	.06	.06	.06	.06
Packing per packed box	.56	.62	.64	.76	.84	.92	1.00	.95
Selling and advertising	.13	.12	.12	.15	.16	.17	.19	.20
Total f.o.b. cost per packed box	1.79	1.87	1.88	2.51	2.33	2.57	2.90	2.58

a/ The average cost shown for each individual cultural operation represents the cost reported only by growers who performed that particular operation and does not represent the average per-acre cost for all growers, including those who did not perform that particular operation.

Source: California Citrus League.

TABLE 56

Estimated Cost of Producing California Oranges, by Counties and Including Arizona, from 1939

County	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
	dollars											
Los Angeles												
Cost per acre	169.30	142.46	166.29	197.92	218.15	244.54	267.89	289.47	279.78	284.86	304.56	291.87
Cost per packed box	.83	.70	.68	.72	.89	.89	.85	1.16	1.04	1.18	1.40	1.00
Orange												
Cost per acre	124.39	115.16	119.17	142.68	179.32	195.42	243.05	238.57	258.28	221.09	221.35	216.75
Cost per packed box	.79	.48	.57	.63	.61	.80	.70	1.44	.82	1.12	.92	1.09
San Bernardino												
Cost per acre	133.35	134.02	150.56	152.38	168.77	247.58	241.15	279.62	261.62	251.39	261.03	293.75
Cost per packed box	.57	.50	.57	.56	1.03	.87	.80	1.11	1.21	1.09	1.89	1.12
Riverside												
Cost per acre	188.93	132.13	142.03	144.73	175.64	287.92	354.57	347.36	331.82	304.54	278.57	267.70
Cost per packed box	.76	.48	.49	.64	.91	1.17	1.24	1.35	1.40	1.27	1.76	.96
Ventura and Santa Barbara												
Cost per acre	156.53	135.43	106.92	175.34	196.28	243.45	258.34	246.60	297.40	332.96	385.32	404.42
Cost per packed box	.68	.54	.37	.80	.51	.84	.53	.80	.90	1.00	1.16	1.11
San Diego												
Cost per acre	134.87	141.75	139.78	139.05	166.03	162.71	208.85	208.74	263.55	247.80	305.25	308.83
Cost per packed box	.69	.78	.63	.79	.74	.86	.81	1.13	1.19	1.05	1.36	.87
Tulare												
Cost per acre	103.65	115.73	92.96	169.13	184.06	211.91	258.97	281.18	261.95	239.18	259.57	215.33
Cost per packed box	.57	.54	.42	.64	.96	.65	.82	1.34	.93	1.07	1.70	1.32
Imperial and Coachella												
Cost per acre	47.32	60.24	60.32	a/	a/	a/	a/	a/	a/	a/	a/	a/
Cost per packed box	.40	.42	.35									
California state average												
Cost per acre	140.66	120.27	133.67	162.19	186.13	228.41	266.25	279.42	276.72	261.77	277.55	259.58
Cost per packed box	.70	.54	.55	.65	.82	.84	.81	1.25	1.01	1.13	1.35	1.08
Arizona												
Cost per acre	53.19	52.63	61.37	a/	a/	a/	a/	a/	a/	a/	a/	a/
Cost per packed box	.55	.54	.57									

a/ Not available.
Source: California Citrus League.

TABLE 57

California Oranges, "On-Tree" Price for All Uses, Cultural Cost, and Net Return Per Box, by Variety, from 1924-25

Season	California total			California Valencia			California navel and miscellaneous		
	Price "on tree" all uses	Cultural cost	Net return	Price "on tree" all uses	Cultural cost	Net return	Price "on tree" all uses	Cultural cost	Net return
	dollars per box								
1924-25	3.11	1.53	1.58	4.02	1.97	2.05	2.58	1.28	1.30
1925-26	2.51	1.29	1.22	2.49	1.27	1.22	2.54	1.32	1.22
1926-27	2.66	1.23	1.43	2.96	1.23	1.73	2.37	1.23	1.14
1927-28	3.86	1.61	2.25	4.56	1.78	2.78	3.29	1.48	1.81
1928-29	1.71	1.00	0.71	1.71	1.05	0.66	1.71	0.94	0.77
1929-30	4.18	1.76	2.42	4.89	1.87	3.02	3.48	1.65	1.83
1930-31	1.28	0.94	0.34	1.29	0.96	0.33	1.28	0.92	0.36
1931-32	0.98	0.76	0.22	0.96	0.76	0.20	1.03	0.76	0.27
1932-33	0.80	0.64	0.16	0.92	0.64	0.28	0.67	0.65	0.02
1933-34	1.51	0.86	0.65	1.86	0.91	0.95	1.01	0.80	0.21
1934-35	1.08	0.57	0.51	1.15	0.56	0.59	0.99	0.59	0.40
1935-36	1.47	0.89	0.58	1.73	0.98	0.75	1.15	0.77	0.38
1936-37	1.86	1.09	0.77	2.06	1.13	0.93	1.62	1.05	0.57
1937-38	0.68	0.63	0.05	0.69	0.62	0.07	0.68	0.65	0.03
1938-39	0.69	0.58	0.11	0.78	0.61	0.17	0.55	0.53	0.02
1939-40	0.97	0.49	0.48	1.04	0.47	0.57	0.85	0.51	0.34
1940-41	1.21	0.47	0.74	1.38	0.47	0.91	0.95	0.46	0.49
1941-42	1.53	0.55	0.98	2.01	0.59	1.42	0.87	0.49	0.38
1942-43	2.69	0.80	1.89	2.87	0.75	2.12	2.32	0.90	1.42
1943-44	2.86	0.84	2.02	3.15	0.86	2.29	2.48	0.80	1.68
1944-45	2.53	0.80	1.73	2.44	0.79	1.65	2.67	0.83	1.84
1945-46	2.92	1.25	1.67	3.15	1.33	1.82	2.57	1.13	1.44
1946-47	1.48	1.01	0.47	1.15	1.00	0.15	1.98	1.04	0.94
1947-48	1.45	1.13	0.32	1.52	1.25	0.27	1.36	0.98	0.38
1948-49	1.58	1.35	0.23	1.35	1.25	0.10	2.08	1.61	0.47
1949-50	1.67	1.08	0.59	1.54	1.11	0.43	1.90	1.05	0.85
1950-51	1.63	1.12	0.51	1.37	1.10	0.27	2.19	1.15	1.04

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Table 57 continued.

Sources: U. S. Bureau of Agricultural Economics. Fruit and Nut Prices, October, 1947, and Fruit Prices (Citrus and Peaches, 1945-1951), October, 1951. Net returns calculated. Cultural cost for total California, weighted average of costs by variety given in Table 53.

TABLE 58

Florida Oranges, "On-Tree" Price for All Uses, Cultural Cost, and Net Return Per Box, from 1927-28

Season	Florida oranges		
	Price "on tree" all uses	Cultural cost	Net return
	dollars per box		
1927-28	2.79	.72	2.07
1928-29	.76	.72	.04
1929-30	1.79	.80	.99
1930-31	1.07	.48	.59
1931-32	1.38	.60	.78
1932-33	.67	.47	.20
1933-34	.91	.46	.45
1934-35	.86	.45	.41
1935-36	1.18	.45	.73
1936-37	1.42	.42	1.00
1937-38	.66	.38	.28
1938-39	.60	.34	.26
1939-40	.52	.42	.10
1940-41	.79	.40	.39
1941-42	1.10	.44	.66
1942-43	1.74	.40	1.34
1943-44	1.81	.50	1.31
1944-45	2.21	.50	1.71
1945-46	2.37	.48	1.89
1946-47	.95	.53	.42
1947-48	.63	.50	.13
1948-49	1.39	.50	.89
1949-50	2.14	.52	1.62
1950-51	1.65	.57	1.08

Sources: U. S. Bureau of Agricultural Economics. Fruit and Nut Prices, October, 1947, and Fruit Prices (Citrus and Peaches, 1945-1951), October 1951. Cultural costs from Table 53. Net returns calculated.

TABLE 59

California Oranges, Winter and Summer; F.O.B. Prices and Major Related Factors, from 1924-25

Season	Winter oranges				Summer oranges			
	California-Arizona f.o.b. price	California-Arizona commercial fresh shipments	Other states commercial fresh shipments	Index of non-agricultural income	California-Arizona f.o.b. price	California-Arizona commercial fresh shipments	Other states commercial fresh shipments	Index of non-agricultural income
	1	2	3	4	5	6	7	8
	dollars per box	million boxes		1935-39=100	dollars per box	million boxes		1935-39=100
1924-25	3.60	11.2	9.6	106	5.26	7.0	.6	110
1925-26	3.50	12.8	8.7	115	3.59	11.3	.5	114
1926-27	3.45	15.1	9.2	116	4.11	12.8	.9	116
1927-28	4.39	13.1	7.7	116	5.74	9.7	.6	120
1928-29	2.80	17.7	13.5	121	2.69	19.7	1.8	123
1929-30	4.45	12.5	8.9	116	5.87	9.5	.9	112
1930-31	2.17	16.0	15.7	105	2.27	16.6	2.1	95
1931-32	1.80	16.2	12.5	83	1.82	16.4	1.0	72
1932-33	1.43	13.8	12.9	67	1.78	16.2	2.9	70
1933-34	1.65	13.0	15.5	77	2.73	15.4	1.9	80
1934-35	1.80	18.7	14.2	83	2.01	19.7	1.8	86
1935-36	1.95	14.3	14.9	92	2.61	17.5	2.4	104
1936-37	2.53	11.7	17.8	106	3.64	11.1	3.8	109
1937-38	1.46	15.6	18.7	100	1.57	21.8	4.6	100
1938-39	1.38	15.0	25.2	104	1.78	17.1	7.0	107
1939-40	1.60	16.8	19.9	111	1.89	22.4	1.9	115
1940-41	1.80	18.5	22.0	126	2.36	22.8	4.9	140
1941-42	1.82	20.7	20.4	171	2.99	24.3	4.9	180
1942-43	3.58	14.0	28.9	205	4.06	23.5	6.7	219
1943-44	3.73	19.0	32.7	234	4.39	27.0	9.7	240

(Continued on next page.)

Table 59 continued.

Season	Winter oranges				Summer oranges			
	California-Arizona f.o.b. price	California-Arizona commercial fresh shipments	Other states commercial fresh shipments	Index of non-agricultural income	California-Arizona f.o.b. price	California-Arizona commercial fresh shipments	Other states commercial fresh shipments	Index of non-agricultural income
	1	2	3	4	5	6	7	8
	dollars per box	million boxes		1935-39=100	dollars per box	million boxes		1935-39=100
1944-45	3.90	19.3	31.0	249	3.90	29.4	3.7	250
1945-46	4.13	18.2	30.7	247	4.80	19.8	6.9	258
1946-47	3.60	18.2	30.3	266	2.94	23.3	6.7	276
1947-48	3.02	17.0	26.4	291	3.44	19.5	8.0	304
1948-49	4.27	9.7	28.3	305	3.55	14.0	5.7	301
1949-50	3.56	12.7	21.2	315	3.62	15.5	5.3	330
1950-51	3.92	13.5	21.7	358	3.69	17.6	5.0	372

Sources: California Fruit Growers Exchange, Statistical Information on the Citrus Fruit Industry, May, 1951 and Supplement, May, 1952.

TABLE 60

California Oranges, Winter and Summer, Multiple Regression Equations and Auxiliary Constants
(The following equations were calculated from data in Table 59)

Equation number	Time period	Dependent variable	Constant term	Independent variables					Adjusted coefficient of multiple correlation $\bar{R}$
				X_2'	X_3'	X_4'	T	T^2	
WINTER ORANGES									
1W	1924-25 to 1941-42	X_1'	7.152	-0.6603 (3.69)	-0.6523 (3.87)	1.3092 (7.15)	-0.0030 (1.25)	-0.0004 (2.32)	0.967
2W	1924-25 to 1941-42 and 1945-46 to 1949-50	X_1'	4.131	-0.5883 (2.66)	-0.3573 (1.57)	1.5030 (5.62)	-0.0057 (1.81)	-0.0003 (1.58)	0.922
SUMMER ORANGES									
				Y_2'	Y_3'	Y_4'	T	T^2	
1S	1925-1941	Y_1'	5.684	-0.9428 (7.67)	-0.1764 (2.35)	1.3394 (6.35)	0.0049 (0.92)	-0.0028 (3.48)	0.965
2S	1937-1941 and 1946-1950	Y_1'	2.214	-0.8346 (2.85)	-0.1792 (1.47)	2.4677 (4.36)	-0.0421 (3.36)	-0.0009 (1.69)	0.944
3S	1925-1941 and 1946-1950	Y_1'	4.957	-0.9061 (6.61)	-0.1580 (1.82)	1.5109 (6.94)	0.0050 (0.83)	-0.0025 (4.16)	0.944

Winter oranges:

X_1' = log F.O.B. price of winter oranges (dollars per box).

X_2' = log California-Arizona fresh shipments. Includes exports (boxes).

X_3' = log fresh shipments from other areas. Includes imports (boxes).

X_4' = log of index of nonagricultural income.

T = time, origin between 1932-33 and 1933-34 (six month intervals).

(Continued on next page.)

Table 60 continued.

Summer oranges:

Y_1' = log F.O.B. price of summer oranges (dollars per box).

Y_2' = log California-Arizona fresh shipments. Includes exports (boxes).

Y_3' = log fresh shipments from other areas. Includes imports (boxes).

Y_4' = log of index of nonagricultural income.

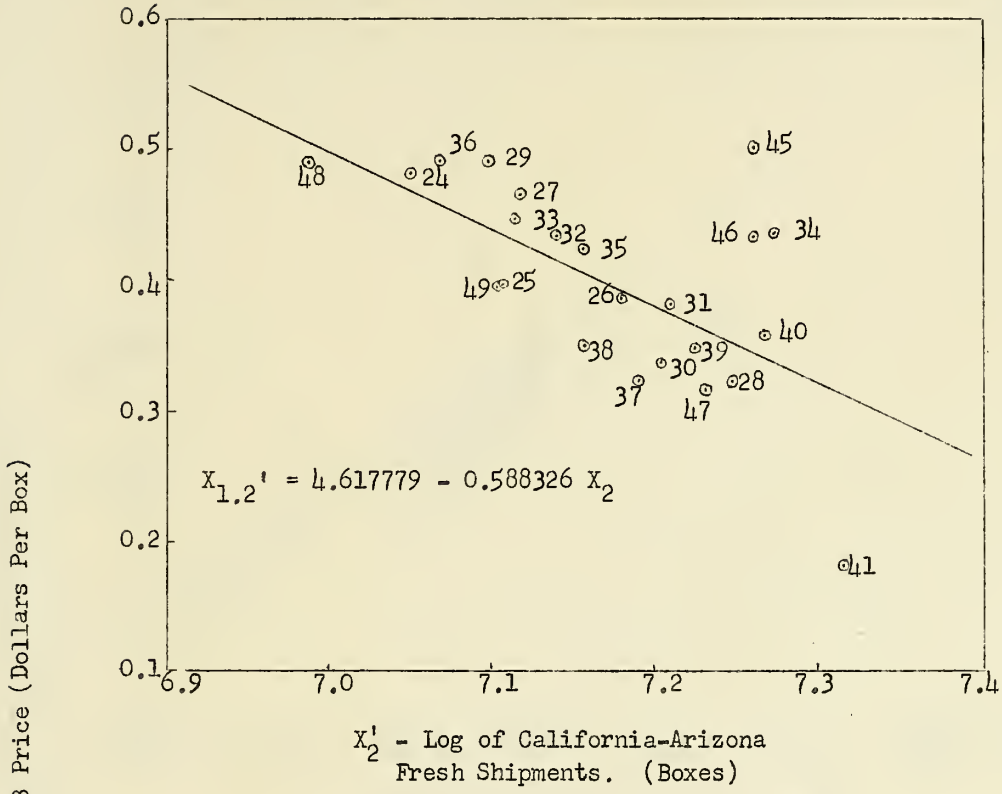
T = time, origin at 1933 for 1S and 3S (years); between 1943 and 1944 for 2S (6 months).

TABLE 61

California Oranges, Winter and Summer; Coefficients of Correlation between Variables in Multiple Regression Analysis (Primes Denote Logarithms) (Intercorrelations of Basic Data from Table 59 Used in Calculating Corresponding Regression Equations of Table 60)

Equation		Winter oranges					
		X_1'	X_2'	X_3'	X_4'	T	T^2
1W	X_1'	1					
	X_2'	-.489747	1				
	X_3'	-.821436	.521936	1			
	X_4'	.381807	.308144	.085236	1		
	T	-.762979	.546751	.903785	.126494	1	
	T^2	.271652	.105034	.001351	.740139	0	1
2W	X_1'	1					
	X_2'	-.380444	1				
	X_3'	-.154741	.316086	1			
	X_4'	.594425	.025815	.621876	1		
	T	.012365	.195572	.914896	.758987	1	
	T^2	.536260	-.118333	.593875	.951988	.760746	1
		Summer oranges					
		Y_1'	Y_2'	Y_3'	Y_4'	T	T^2
1S	Y_1'	1					
	Y_2'	-.866702	1				
	Y_3'	-.667835	.649653	1			
	Y_4'	.458058	-.123703	-.039697	1		
	T	-.669330	.719120	.855718	-.013382	1	
	T^2	.225383	-.152961	-.084922	.706407	0	1
2S	Y_1'	1					
	Y_2'	-.434514	1				
	Y_3'	.379912	-.017231	1			
	Y_4'	.737885	-.031893	.534733	1		
	T	.643940	.009987	.486898	.986546	1	
	T^2	.125638	-.778394	-.076095	-.000629	0	1
3S	Y_1'	1					
	Y_2'	-.689692	1				
	Y_3'	-.298631	.641639	1			
	Y_4'	.408567	.186033	.580969	1		
	T	-.125533	.567674	.887290	.772461	1	
	T^2	.301934	.166600	.578572	.958670	.801570	1

Fig. 1. California Winter Oranges; Statistical Relations between F.O.B. Prices and Major related factors. (Net regression charts for analysis corresponding to equation 2W, table 60)



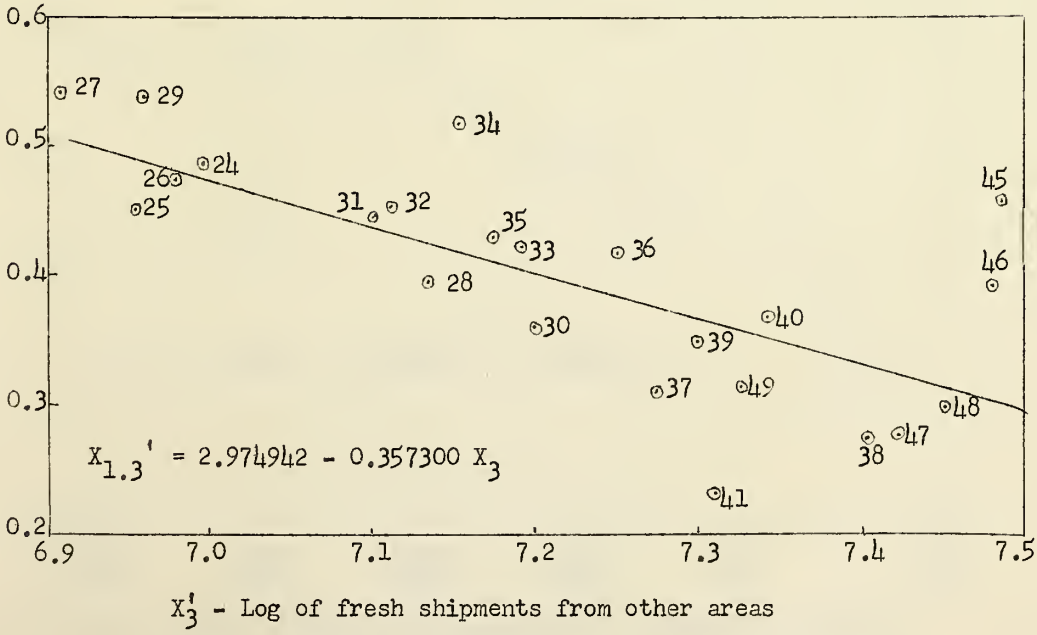


Fig. 1 (Continued)

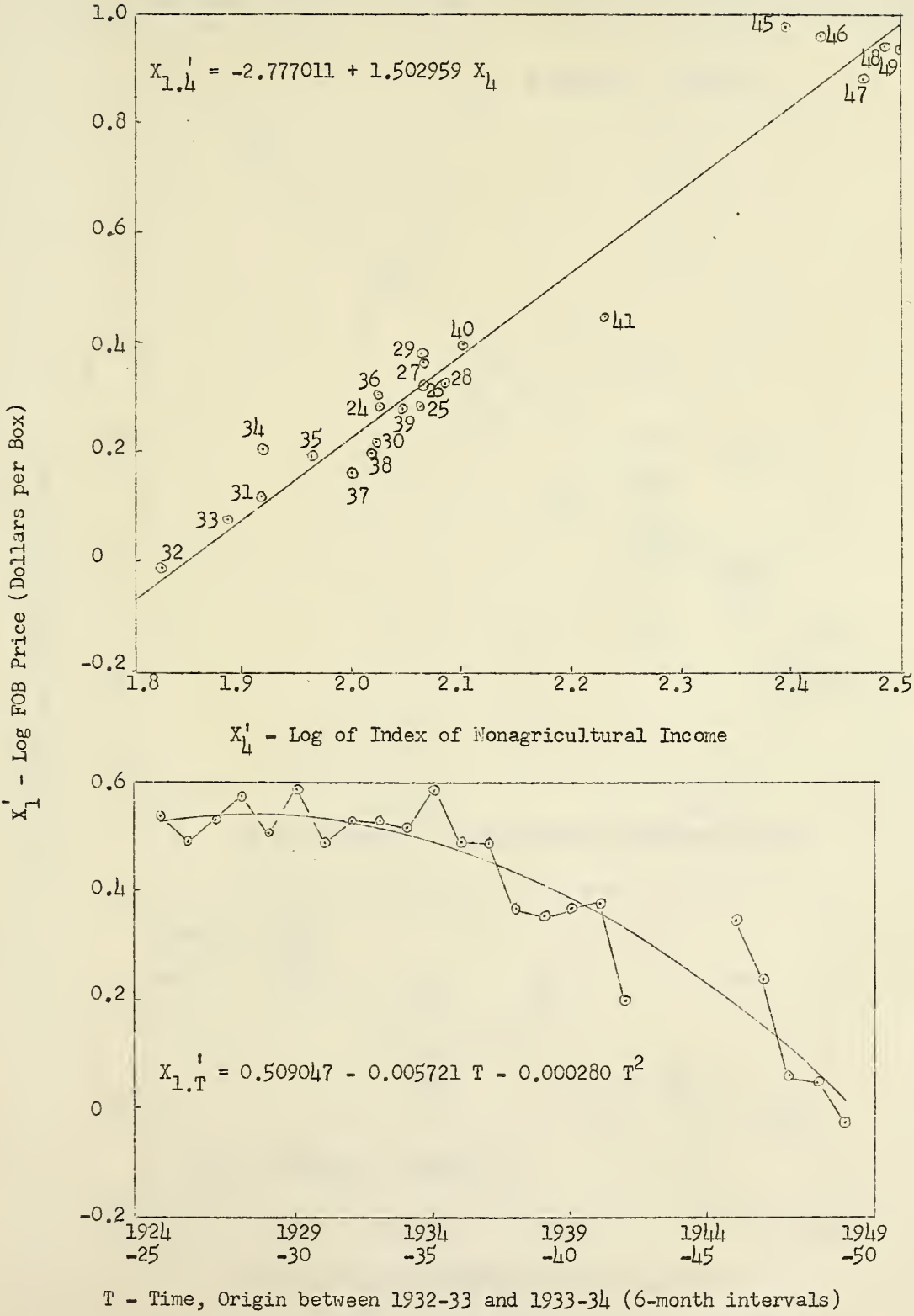
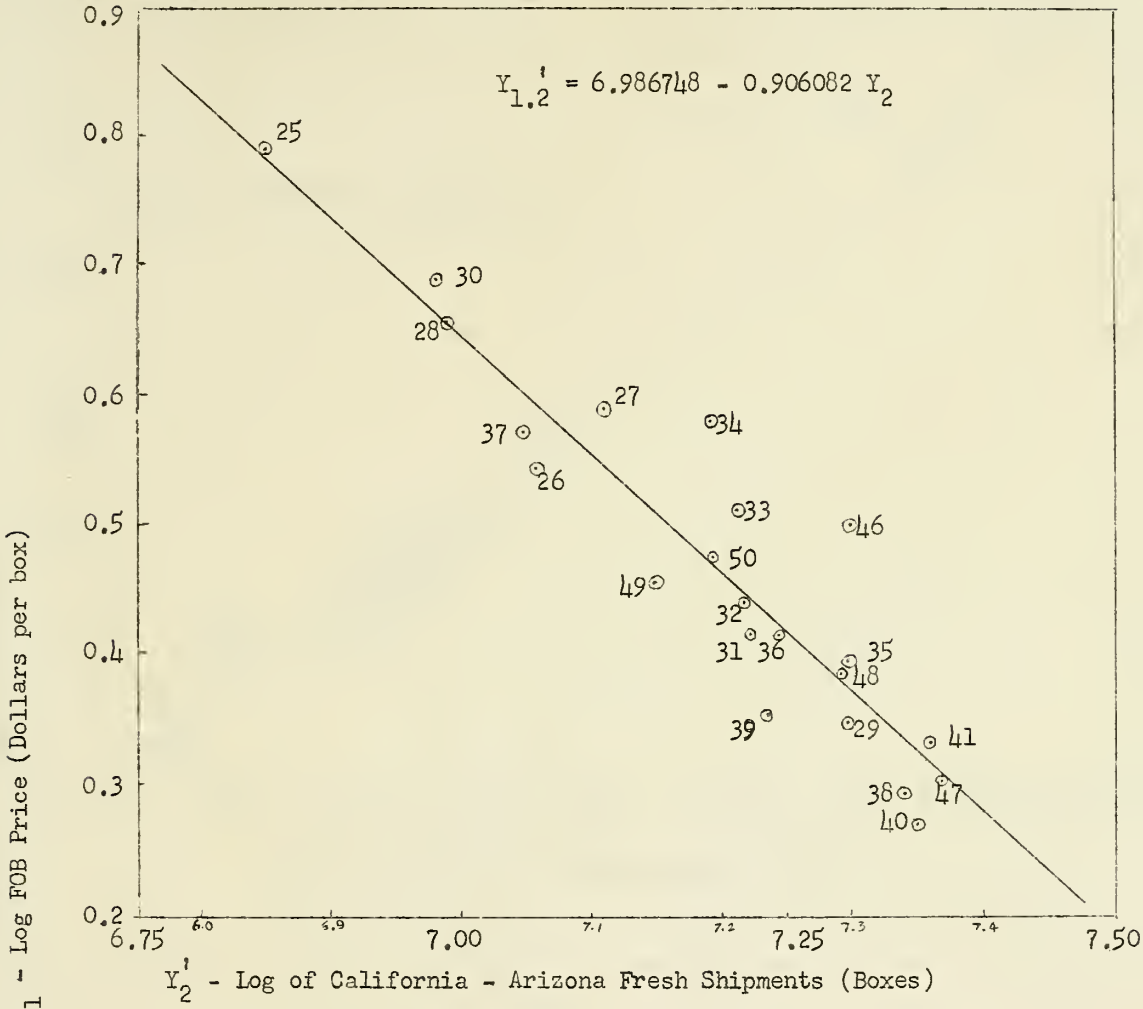


Fig. 2. California Summer Oranges; Statistical Relations between F.O.B. Prices and major related factors
(Net regression charts for analysis corresponding to equation 3S, table 60)



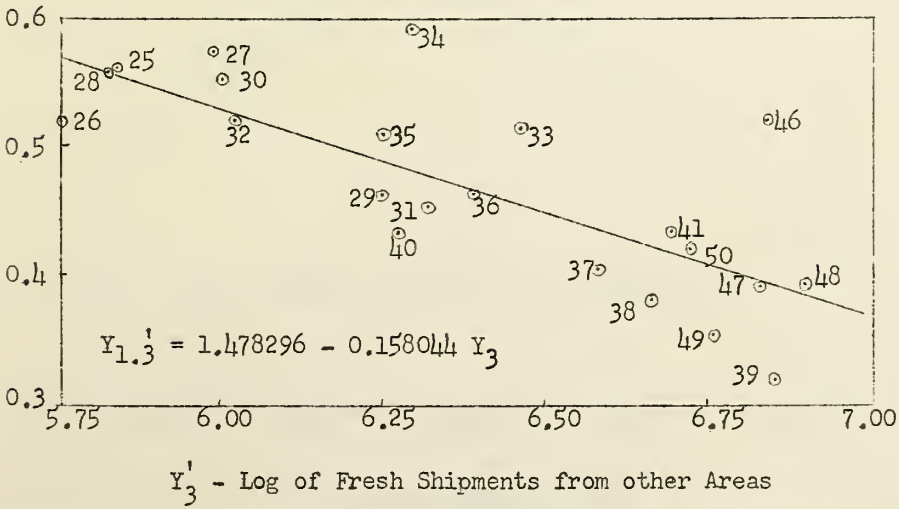


Fig. 2 (Continued)